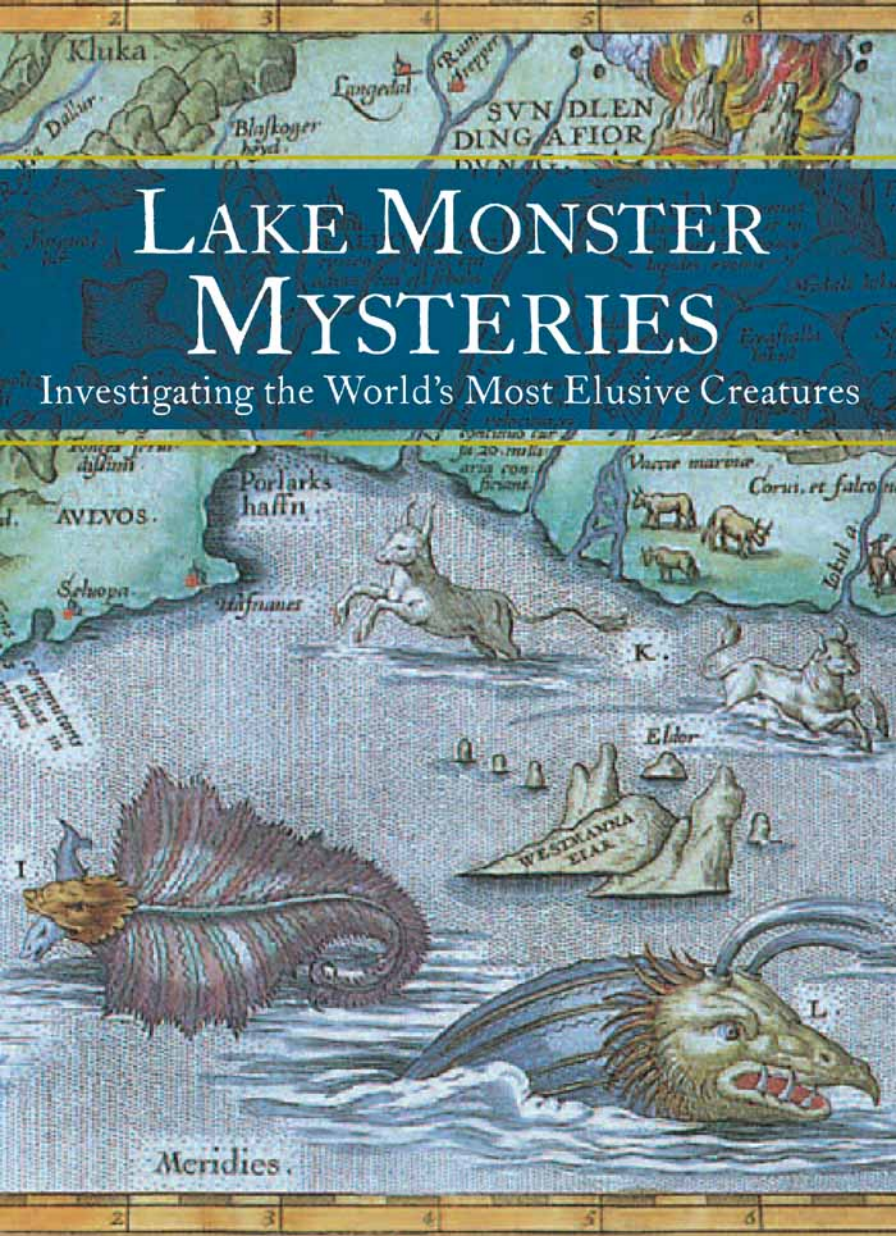
Lake Monster Mysteries

Investigating the World's Most Elusive Creatures



Benjamin Radford and Joe Nickell

With a Foreword by Loren Coleman

Lake Monster Mysteries

This page intentionally left blank

Lake Monster Mysteries

Investigating the World's Most Elusive Creatures

Benjamin Radford
Joe Nickell

Foreword by Loren Coleman

The University Press of Kentucky

Publication of this volume was made possible in part by a grant
from the National Endowment for the Humanities.

Copyright © 2006 by The University Press of Kentucky

Scholarly publisher for the Commonwealth,
serving Bellarmine University, Berea College, Centre College of Kentucky,
Eastern Kentucky University, The Filson Historical Society, Georgetown College,
Kentucky Historical Society, Kentucky State University, Morehead State University,
Murray State University, Northern Kentucky University, Transylvania University,
University of Kentucky, University of Louisville, and Western Kentucky University.
All rights reserved.

Editorial and Sales Offices: The University Press of Kentucky
663 South Limestone Street, Lexington, Kentucky 40508-4008
www.kentuckypress.com

10 09 08 07 06 5 4 3 2 1

Some of the material was previously published and is reprinted here courtesy of the Committee for the Scientific Investigation of Claims of the Paranormal. Parts of chapter 1 were published in the March 1996 *Skeptical Briefs* newsletter; chapter 2 in the July–August 2003 *Skeptical Inquirer;* chapter 3 in the June 2004 *Skeptical Briefs* newsletter; chapter 4 in the March–April 1999 *Skeptical Inquirer;* chapter 6 in the December 2004 *Skeptical Briefs* newsletter; chapter 7 in the January–February 2006 *Skeptical Inquirer;* parts of chapter 8 in the January–February 2000 *Skeptical Inquirer;* and appendix 1 in the September 2003 *Skeptical Briefs* newsletter. All other material is new and original.

Library of Congress Cataloging-in-Publication Data

Radford, Benjamin, 1970-
Lake monster mysteries : investigating the world's most elusive creatures / Benjamin Radford and Joe Nickell.
p. cm.
Includes bibliographical references and index.
ISBN-13: 978-0-8131-2394-3 (hardcover : alk. paper)
ISBN-10: 0-8131-2394-1 (hardcover : alk. paper)
1. Monsters. 2. Lake animals. I. Nickell, Joe. II. Title.
QL89.R33 2006
001.944--dc22 2005031052

This book is printed on acid-free recycled paper meeting the requirements of the American National Standard for Permanence in Paper for Printed Library Materials.

Manufactured in the United States of America.

Member of the Association of
American University Presses

To Sir Richard Burton, Johan Reinhard,
Ernest Shackleton, Francisco de Orellana,
Edmund Hillary and Tenzing Norgay,
and the nameless and countless other explorers
whose bravery and thirst for knowledge inspired me.
—B. R.

IN MEMORIAM
My parents, J. Wendell and Ella T. Nickell,
who nurtured my inquisitiveness,
and three paranormal investigators
who led the way in conducting hands-on investigations:
magicians Harry Houdini and Milbourne Christopher,
and my late dear friend, psychologist Robert A. Baker.
—J. N.

This page intentionally left blank

The interests of truth have nothing to apprehend from the keenness of investigation, and the utmost severity of human judgment.

—Dr. Stubbins Ffirth, pioneering medical investigator, 1804

This page intentionally left blank

Contents

Foreword *xi*

Acknowledgments *xvii*

Introduction *1*
Benjamin Radford

1 Loch Ness *11*
Joe Nickell

2 Lake Champlain *27*
Joe Nickell and Benjamin Radford

3 Lake Memphremagog *71*
Joe Nickell

4 Silver Lake *79*
Joe Nickell

5 Lake Crescent *89*
Benjamin Radford

6 Lake George *101*
Joe Nickell

7 Lake Okanagan *111*
Joe Nickell and Benjamin Radford

8 Other Notable Lake Monsters *137*
Joe Nickell and Benjamin Radford

Conclusion *149*
Joe Nickell

APPENDIXES
Benjamin Radford

1 Mysteries and Misinformation: How Cryptozoologists Created a Monster *153*

2 Eyewitness (Un)reliability *161*

3 Animating the Champ Photograph *165*

4 Ogopogo Film and Video Analysis *168*

Index *175*

Foreword

There are always two sides to a story. The book you are about to read is the best version to date of a skeptical look at the entities known as lake monsters. The formal examination of lake monsters has been a subfield of cryptozoological research for more than two centuries. During the fifty years that I have been studying these freshwater cryptids, I have learned much about them.

According to surveys and research that I and other cryptozoologists have conducted, more than a thousand lakes around the world harbor large, unknown animals unrecognized by conventional zoology. Such claims have a long history and a rich representation in the world's mythology and folklore. The term "lake monsters" is a relatively recent appellation; traditionally, such creatures have gone by a variety of names, including great serpents, dragons, water horses, worms, and others. They share the landscape with other legendary entities, such as Sasquatch, sea serpents, and black panthers.

Some of the long-ago sightings are remembered in fantastic fashion, which is often what happens when people have real encounters with new animals in new lands. In "Water-Monsters of American Aborigines" (*Journal of American Folklore*, 1889), Albert S. Gatschet surveyed stories of peculiar aquatic monsters, including the great horned reptile of the Ohio River region and the horned snake. The Creeks, when they lived in Tennessee, spoke of a large, horned snakelike animal that frequented water holes. The creature could be brought to the shore by the magical singing of Creek elders, and when it showed its horn, the Indians would cut it off. The horn was then taken as a fetish and carried into war, to ensure success in battle.

An account from the Oneida branch of the Tuscaroras, collected by David Cusick and published in 1828, tells of the "Mosqueto," which rose from Lake Onondaga (near Syracuse, New York) and slew a number of people. The natives also said that 2,200 years before the time of Columbus (approximately 700 BC), a great horned serpent appeared on Lake Ontario and killed onlookers with its overpowering stench.

The strikingly similar horned beast of Alkali Lake (now known as Walgren Lake) near Hay Springs, Nebraska, was the subject of tales by the local Indians. These native Nebraskans told the first white settlers in the area to be on the lookout for the monsters. The legend seems to have had some truth, for more modern sightings followed. The *Omaha World-Herald* of July 24, 1923, carried the testimony of J. A. Johnson, who stated, "I saw the monster myself while with two friends last fall. I could name 40 other people who have also seen the brute." Johnson claimed that the stubby, alligatorlike head had a projection like a horn on it between the eyes and nostrils. The gray-brown creature devoured livestock, uttered a dreadful roar, and smelled horrible. News of Alkali Lake's horned wonder spread around the world.

Michel Meurger and Claude Gagnon underscore the importance of these legends in their book *Lake Monster Traditions* (1988): "From Alaska to New Mexico the belief in a horned serpent-shaped water beast of enormous dimensions is widespread." They go on to place such creatures in a folkloric framework.

Probably the issue of lake monsters would be of concern only to antiquarians were it not for a large body of modern reports from seemingly credible eyewitnesses, most prominently at Loch Ness in Scotland, Lake Champlain in Vermont–New York–Quebec, and Lake Okanagan, British Columbia. In addition, there are unexplained, instrumented observations of large, moving bodies under the water's surface, as well as a small number of intriguing photographs that don't seem—at least from my cryptozoologist's point of view and examination—to be fraudulent or to depict mundane objects. In other words, the evidence isn't conclusive and probably won't be until incontrovertible physical evidence (a body—or at least a part of one) is available. Nonetheless, it is suggestive enough to keep the issue very much alive.

The scientific investigation of lake monsters initially occurred in the beginning of the nineteenth century, and it had much to do with the controversy surrounding sea serpents. During those early days, some journalists and theorists assumed that lake monsters were sea serpents that had either temporarily or permanently entered freshwater bodies from the ocean. It was further reasoned that a sea serpent would be more easily captured in an accessible place like a lake or river than in the vast ocean. This, of course, has not proved to be true, but it was hardly an unreasonable conclusion at the time.

Typical of nineteenth-century references to lake monsters is an article from the *Inverness Courier* (Inverness is a small city north of Loch Ness), reprinted in the *London Times* in March 1856:

> The village of Leurbost, parish of Lochs, Lewis [an Outer Hebrides island off Scotland's northwest coast], is at the present the scene of an unusual occurrence. This is no less than the appearance in one of the inland fresh water lakes of an animal which from its great size and dimensions has not a little puzzled our island naturalists. Some suppose him to be a description of the hitherto mythical water-kelpie [a dangerous shape-shifting monster that appeared as a horse to lure unsuspecting travelers onto its back, after which it would plunge into the water to drown them]; while others refer it to the minute descriptions of the "sea serpent," which are revived from time to time in newspaper columns. It has been repeatedly seen within the last fortnight by crowds of people, many of whom have come from the remotest places of the parish to witness the uncommon spectacle.
>
> The animal is described by some as being in appearance and size like a "huge peat stack," while others affirm that a "six-oared boat" could pass between the huge fins [humps?], which are occasionally visible.
>
> All, however, agree, in describing its form as that of the eel; and we have heard one, whose evidence we can reply upon, state in length he supposed it to be about 40 feet.

Though the *Courier* correspondent suggested that the witnesses had seen an oversized conger eel, later theorists took their cue from Dutch zoologist Antoon Cornelis Oudemans (1858–1943), author of the influential book *The Great Sea Serpent* (1892). Oudemans believed that huge long-necked seals were responsible for serpent sightings. That was also the conclusion of investigator Peter Olsson, who studied reports from Storsjo, a deep mountain lake in central Sweden. Then, after the increase in firsthand eyewitness accounts from Loch Ness in the early 1930s (after trees were cleared from around the lake for a new road), Oudemans extended his theory of a large, long-necked pinniped to that lake. Though the long-necked seal theory has long been out of fashion, it did anticipate subsequent speculations that the animals being sighted were mammals rather than reptiles (still a popular belief in the United Kingdom).

By the 1970s, many cryptozoologists had signed on to University of Chicago biologist Roy P. Mackal's notion that the creatures were most likely zeuglodons—primitive, snakelike whales (cetaceans) that had disappeared from the fossil record some twenty million years ago but might still exist in certain lakes in the world's northern regions. To a considerable extent, zeuglodons have eclipsed plesiosaurs as cryptozoologists' favorite candidate for the allegedly extinct animals behind lake monster sightings.

There is much to be said for the zeuglodon hypothesis. Many of the reports describe animals that at least look like zeuglodons. Moreover, the undulating motion noted in sightings widely separated in time and space is characteristic of mammals but not of reptiles. Like whales, lake monsters are said to have lateral rather than vertical tails. Also in common with whales, lake monster tails are forked. After a careful analysis of Canadian reports, including those of the celebrated Ogopogo of British Columbia's Lake Okanagan, Mackal declared that the characteristics "fit one and only one known creature": the zeuglodon, or at least a freshwater evolutionary variant of one.

Intriguingly, in the arena of new marine mammal discoveries, nearly thirty new species of cetaceans have been classified in recent decades. Yet hoaxes, mirages, objects as commonplace as logs and waves, and

the occurrence of known animals in unexpected places complicate the picture.

No North American lake monster can claim any evidence for its existence stronger than striking eyewitness testimony and the rare photograph, including the remarkable one taken by Sandra Mansi, which some of us have more confidence in than do the authors of this book. This doesn't mean that more compelling evidence isn't out there waiting to be uncovered. All it means is that the proper resources, funding, and expertise have not been brought to bear on the question. Real science is expensive, and because of the ridicule associated with the subject of lake monsters, those few scientists who have investigated the phenomenon have done so largely on their own, without institutional support.

In the end, science has little to say about lake monsters because science has paid, at best, scattered and brief attention to them. That's why I find this book a rare treat. These animals, if they exist, need not forever remain enigmatic and elusive. The answers—and the proof—may be as close as the first concerted, sustained scientific effort to get to the bottom of the mystery.

Loren Coleman

Loren Coleman, the world's leading living cryptozoologist, is the author or coauthor of more than two dozen books, including The Field Guide to Lake Monsters, Sea Serpents, and Other Mystery Denizens of the Deep *(New York: Tarcher/Penguin, 2003);* Mysterious America: The Revised Edition *(New York: Paraview, 2001); and* Cryptozoology A to Z: The Encyclopedia of Lake Monsters, Sasquatch, Chupacabras, and Other Authentic Mysteries of Nature *(New York: Simon and Schuster, 1999). Coleman personally favors the nineteenth-century theory that lake monsters are more likely a new species of pinnipeds rather than landlocked prehistoric reptiles or evolved cetaceans.*

This page intentionally left blank

Acknowledgments

In addition to those mentioned in the text, we are grateful to the following people and organizations:

Our colleagues at the Committee for the Scientific Investigation of Claims of the Paranormal, notably Timothy Binga for research assistance, Barry Karr and Pat Beauchamp for help with financial matters, and Ranjit Sandhu and Paul Loynes for manuscript preparation.

For the Silver Lake chapter, Tom Pickett, Department of Physics, University of Southern Indiana; Tammy Miller, Perry Chamber of Commerce; Barbara Henry, Perry Public Library; the staff of the Special Collections Department, Buffalo and Erie County Public Library; and the Inter-Library Loan Department, New York State Library.

For the Lake George chapter, the staff of the Silver Bay Association, Silver Bay, New York, as well as Bertha Dunsmore, clerk, and Ethel Andrus, historian, Hague Community Center, Hague-on-Lake George, New York.

For the Lake Okanagan chapter, Tom Flynn, for professional assistance in planning our experiment; the staff of the Okanagan Regional Library and the Kelowna Museum; the entire National Geographic Television crew; and the land surveyors of the firm Runnalls Denby. A tip of the hat is also due the late J. Richard Greenwell, cofounder of the International Society of Cryptozoology.

This page intentionally left blank

Introduction

People have always had a fascination with strange, mysterious creatures roaming the earth, lurking beneath the water, and flying in the sky. Centaurs, unicorns, Pegasus, and other fantastic creatures have been claimed or rumored to exist since ancient times. Greek myths told of harpies—half-woman, half-bird creatures—that attacked Jason and his adventuring Argonauts. Since man took to the sea, sailors and fishermen have reported dangerous behemoths that could swallow ships whole or drag men to their watery doom, as well as the more alluring mermaids.

Our thirst for the exotic and fantastic remains unquenched, and humanity has created an amazing array of unseen (or rarely seen) creatures, forces, and entities to populate the world. English fairies, Chinese dragons, Irish leprechauns, and Swedish trolls, to name a few, are important elements of folklore. Some mysterious or paranormal creatures even come from religious texts, such as the angels of the Bible and the djinn (genies) of the Koran.

The distinction between the real and the imagined is in some ways a modern one. Before the Enlightenment, rumor, mysticism, and superstition were often seen as perfectly valid ways of knowing about the world. Scholars and authorities often wrote about unknown or mythical creatures as if they were confirmed fact. In 1544, for example, Sebastian Munster wrote the popular *Cosmographia Universalis,* which contains vivid descriptions of dragons and basilisks (winged serpents whose gaze—like that of the snake-haired Medusa—could turn men

Figure I.1 A 1585 map of Islandia (Iceland) by Ortelius. Early maps often depicted fantastic creatures such as these, forewarning intrepid travelers of the dangers they might face.

to stone). Swiss naturalist Conrad Gesner, in *Historia Animalium,* describes unicorns and winged dragons, as does Pliny the Elder in his *Natural History.*

Maps created as late as the 1700s often included illustrations of sea monsters and mythical creatures (as shown in figure I.1 and on this book's dust jacket). The cartographers and illustrators didn't consider these to be exaggerated decorations but rather legitimate, valid depictions (based on stories and legends) of what intrepid travelers to remote areas could expect to encounter. One copperplate map, published around 1650 in Amsterdam, shows several fantastic creatures and huge sea serpents alongside such known land mammals as elephants, lions, and crocodiles.

Animals that now seem commonplace, or at least not extraordinary, were considered exotic or even fictitious just a century or so ago. Giraffes, for example, were displayed in carnivals and circuses during

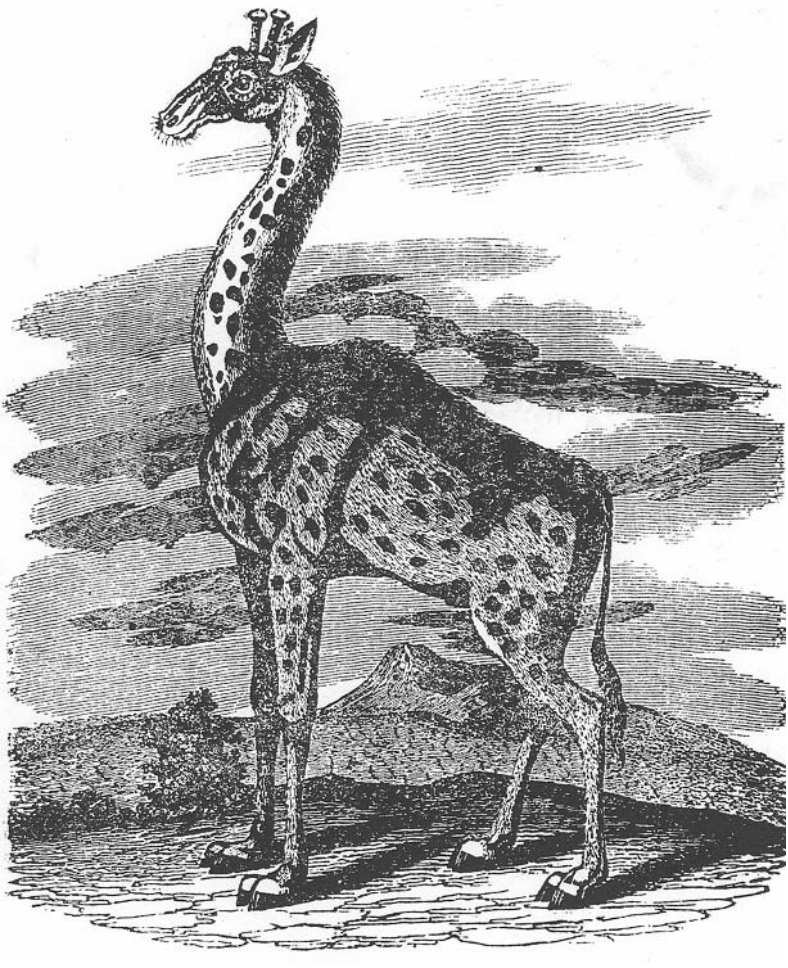


Figure I.2 A "cameleopard" is advertised in the 1800s.

the 1800s. They were called *cameleopards,* reflecting the fanciful combination of the long neck and general head shape of a camel with the spots of a leopard (figure I.2).

As science has shed light on more of the natural world, the line between the real and the fantastic has grown sharper. With the Enlight-

enment came a quest to discern fact from fiction, to poke and prod and tease out what is real from what is not. In modern times, that search has developed into the scientific discipline of zoology, as well as the less scientific field of cryptozoology. Those who search for unknown, hidden, or "out-of-place" creatures, such as Bigfoot and the Loch Ness monster, dub themselves *cryptozoologists.*

In trying to link ancient legends to modern truth claims, the history of the mythical kraken is instructive. Early texts and legends tell of a monstrous, tentacled creature far larger and more fearsome than any known animal. Though some of the stories are no doubt exaggerated, it is generally agreed that a modern version of the kraken does indeed exist and is, by nearly any definition, a monster: it is the giant squid (figure I.3). There's no doubt that giant squid exist; yet they are poorly studied and rarely seen. The largest one, discovered in New Zealand, was estimated at sixty-five feet in length.

On September 30, 2004, Japanese zoologists Tsunemi Kubodera and Kyoichi Mori became the first to see and film a giant squid at depth. The creature, about twenty-six feet long, was found 2,953 feet deep. The researchers, who were investigating whale-feeding areas in the North Pacific near the Ogasawara Islands, used bait to attract the squid and a remote camera to film it. They watched as the squid attacked the food with its elongate feeding tentacles; after a four-hour struggle, the squid left behind one six-foot tentacle.

Over the centuries, huge, mysterious masses of marine flesh have occasionally washed ashore on beaches around the world. Dubbed "blobsters" (or "globsters"), these large carcasses are often so badly decomposed that there isn't enough material (or enough of a variety of materials) to make a definitive identification. To many people, this phenomenon may seem like strong evidence for sea monsters. Recently, a team of biologists led by Sidney Pierce examined the mystery anew. As the authors point out, "Wild claims, especially in the nonscientific literature, are regularly made that the blobs are the remains of sea monsters. For example, the Tasmanian West Coast Monster is still referred to as a monster, although an Australian scientific team . . . identified it as a whale. Other relics such as the [1896] St. Augustine (Florida) Sea Monster and the Bermuda

Figure I.3 A true monster of the deep, the elusive giant squid can weigh more than a ton and exceed seventy-five feet in length. This specimen, the best preserved in the world, is on display at a museum in St. John's, Newfoundland. (Photo by Benjamin Radford)

Blob are still described by some as the remains of a gigantic octopus, even though A. E. Verrill—who named the St. Augustine specimen sight unseen—recanted his identification in favor of whale remains . . . and in spite of microscopic and biochemical analyses showing that they were nothing more than the collagenous matrix of whale blubber" (Pierce et al. 2004, 126). In 2004, Pierce and his colleagues examined all available blobster materials using electron microscopes and applied biochemical, molecular, and DNA analysis. The conclusion: the specimens were unmistakably from various species of great whales. Scientific analysis, it seems, has finally explained one of the world's great mysteries of the sea. The many mentions of globsters in books on the "unexplained" will have to be revised in the cold light of hard evidence.

Nevertheless, the ocean is one of the last truly unexplored areas of the world, and it is a natural place to imagine being inhabited by monsters. Yet in modern times, very few sea monsters have been sighted. Today, most reports of mysterious aquatic creatures involve so-called lake monsters. Though most people have heard of a few famous lake monsters, such as those in Loch Ness and Lake Champlain, the number of lakes said to contain mysterious creatures goes far beyond two or three—or even two or three hundred.

As one writer put it in a 1997 article in *Fortean Times* magazine, "Cryptozoologists struggle to reconcile belief in physical creatures with the ever-growing number of lakes which are supposed to include monsters. In *Alien Animals* (1980), Janet and Colin Bord list 265 monster-haunted lakes; in the past seventeen years the total has almost certainly crept past 300. It does not seem possible that all these lakes are home to monsters" (Dash 1997). Between 1997 and 2003, the number of lake monsters seems to have tripled; Loren Coleman, in his foreword to this book, suggests that more than a thousand lakes across the globe are said to hold mysterious creatures.

In some ways, the very popularity of lake monsters argues against their existence. Unless one wishes to assert that there are tens of thousands of lake monsters populating the earth's lakes (somehow all living and dying without leaving hard evidence of their presence), it is reason-

able to suggest that perhaps humans have a tendency to see things that aren't actually there.

There is plenty of evidence for lake monsters, but not all of it is *good* evidence; quite the contrary, often all that is needed to create a lake monster is a sighting or two of *something* odd in the water, perhaps coupled with local stories. Mysteries need very little to grow on.

Lake monsters are unique, in that the beast is typically confined by the boundaries of the body of water it inhabits. Unlike a Bigfoot creature, for example, or a sea serpent that could be just about anywhere in a vast and often inaccessible domain, the finite area of a lake should make locating and identifying these creatures relatively easy. Cryptozoologists, however, suggest that lakes with outlets to other lakes or to oceans allow a means for migration or escape, thus explaining why repeated searches come up empty.

Although the cases collected for this book are not exhaustive, they provide a good sampling of the different types of sightings, possible explanations for those sightings, hoaxes, evidence claims, and legends surrounding lake monsters. We include the Loch Ness monster—the most famous lake monster in the world—of course, but also "Champ" of Lake Champlain, touted by many experts as having the best evidence for lake monsters anywhere, with many eyewitness sightings as well as a world-famous photograph. We also tackle lesser-known, overlooked, but just as interesting lake creatures, such as those in Silver Lake and Lake George in New York, Quebec's Lake Memphremagog, Lake Crescent in Newfoundland, and British Columbia's Lake Okanagan. Although each lake, each creature, and each sighting is unique, many of the same issues arise time and again. Sightings from Scotland to Argentina, Canada to Congo, all boil down to a predictable set of basic issues: local legends, eyewitness descriptions, photographs or other images, artifact depictions, and the like.

Rather than simply cataloging the sightings, we have chosen a different path: in-depth, hands-on investigations. The result, we hope, is thorough enough and scholarly enough for avid lake monster researchers and entertaining enough for mystery lovers and armchair crypto-

zoologists alike. Readers will also get a taste of what it's like to work alongside us as we plunge into the depths of these mysteries firsthand—with the exception of Loch Ness. Although the Loch Ness monster is the world's most famous, in some ways, that makes it less interesting from an investigative standpoint. The loch has been continually and meticulously searched, and although we hope to investigate it ourselves someday, there was little new that we could bring to the mystery for now. For a careful and critical examination, see Ronald Binns's book *The Loch Ness Mystery Solved.*

Our book is unique in several respects. Many books on this topic are not so much *written* as *compiled,* consisting essentially of collections of entertaining stories and legends written to entice and amuse. Little if any attempt is made to actually investigate the sightings or even treat the subject as a mystery to be solved. This can be frustrating for readers and researchers who want to go beyond the stories and get to the truth. Stories and sightings are fine, but many people want to know what science says about these mysteries. With this book, we bring some much-needed scientific rigor and scholarship to a field better known for its wild, unsubstantiated claims than its careful examination of the facts.

Although library and archival research is important (and we've both spent plenty of time in the book stacks), it is also important, when possible, to go to the lake, interview eyewitnesses, and conduct original fieldwork. It's easy and wrongheaded to dismiss strange sightings out of hand as silly—and just as wrong to accept them as true—without investigating the facts. At times, scientists and investigators are accused of ignoring evidence, trying to disprove claims, and assuming that eyewitnesses are lying. Instead of presuming the answer—that a given creature does or doesn't exist—and trying to find proof to support that position, we believe in following the evidence to whatever conclusion it suggests.

If the goal of researching a phenomenon is to understand it, then no damage is done by explaining it, or at least offering a plausible explanation. Every mysterious sighting explained, every hoax uncovered, every assertion verified or debunked is one step closer to knowing the truth of what lurks in the lakes. Skeptics and believers alike should

strive to distinguish what is *known* from what is *supposed,* what is *true* from what is *mistaken.* It is only though this process—essentially a scientific process—that real understanding can emerge from the lakes' muddy waters.

Often, mysteries can be solved simply by consulting original sources instead of other writers' works, which are sometimes incomplete or erroneous (for more on this, see appendix 1). In one case, important details of a famous eyewitness's experience had been omitted from all previous accounts and are published here for the first time. In the twenty-five years since the sighting, no one had bothered to get the full story from the witness. Thus, much of the information in this book is based on original research. Our investigations took us to small bars and large boats, out-of-the-way motels and lakeside vigils. We spoke to dozens of people, from housewives to professional monster hunters, biologists to fishing guides, photographic experts to tavern owners. Each person contributed valuable opinions and evidence, all pieces of the mystery mosaic.

If some experts are to be believed, we risked our very lives by pursuing the mysteries examined in this book. Ogopogo, Lake Okanagan's monster, is said to have attacked and drowned skeptics. And consider W. Haden Blackman's (1998, 57) warning about researching the Lake Champlain creature: "With its impossible size, glowing green eyes, and regal bearing, Champ is a mercurial monster of epic proportions. Some witnesses suffer psychological aftershocks following their encounter. . . . It could easily smash through a bothersome researcher's boat to drag the pest into the lake's icy depths."

We knew that such investigations might be dangerous, but we had faced peril before, such as braving the famously cursed "Devil's Hole" cave near Niagara Falls, New York (Nickell 2001). As we approached these investigations, there was little talk of the danger, perhaps understandable among men uncomfortable about showing their inner fear. It wasn't until later that we checked our insurance policies to see if they covered treatment for the "psychological aftershocks" we might endure if we were fortunate enough to come face-to-face with one of these creatures.

We all love a good monster story, and there are some real whoppers in here—referring to both the creatures in the lakes and the stories told about them. But many of us also want a peek behind the curtain, an explanation of what's really there or what might be there. So come along with us as we explore lake monster mysteries.

REFERENCES

Binns, Ronald. 1984. *The Loch Ness mystery solved.* Buffalo, N.Y.: Prometheus Books.

Blackman, W. Haden. 1998. *The field guide to North American monsters.* New York: Random House.

Coleman, Loren, and Patrick Huyghe. 2003. *The field guide to lake monsters, sea serpents, and other mystery denizens of the deep.* New York: J. P. Tarcher.

Dash, Mike. 1997. Lake monsters: Status report. *Fortean Times* 102 (September): 31.

Nickell, Joe. 2001. *Real-life X-files: Investigating the paranormal.* Buffalo, N.Y.: Prometheus Books.

Pierce, S., S. Massey, N. Curtis, G. Smith, C. Olavarria, and T. Maugel. 2004. Microscopic, biochemical, and molecular characteristics of the Chilean blob and a comparison with the remains of other sea monsters: Nothing but whales. *Biological Bulletin* 206 (June): 125–33.

1

Loch Ness

Of all the sea serpent–like creatures that are reputed to inhabit some of the world's large lakes, none is more famous than "Nessie," the purported Loch Ness monster (figure 1.1). Supported by sightings, photographs, and other evidence, Nessie continues to spark the popular imagination.

SIGHTINGS

Reports of the existence of a creature in the great Scottish lake date as far back as the sixth century, when St. Columba supposedly saved a man's life by commanding the attacking monster to depart. (Such pious legends of saints—some of whom could reportedly fly and others who could allegedly live without eating—are given little credence today [Nickell 1993, 231–63].) The number of subsequent encounters is disputed until the twentieth century, when the modern wave of sightings began.

On May 2, 1933, the *Inverness Courier* carried an account by an anonymous correspondent (actually, one Alexander Campbell) titled "Strange Spectacle in Loch Ness," telling how an unnamed couple had seen the waters of the loch disturbed by "no ordinary denizen of the depths," at least "judging by the state of the water in the affected area." It later turned out that Campbell's account was greatly exaggerated: only one of the two individuals had seen anything, and that person had described it as seeming to be caused "by two ducks fighting" (Binns 1984, 12).

The week after Campbell's report, the *Courier* published a response

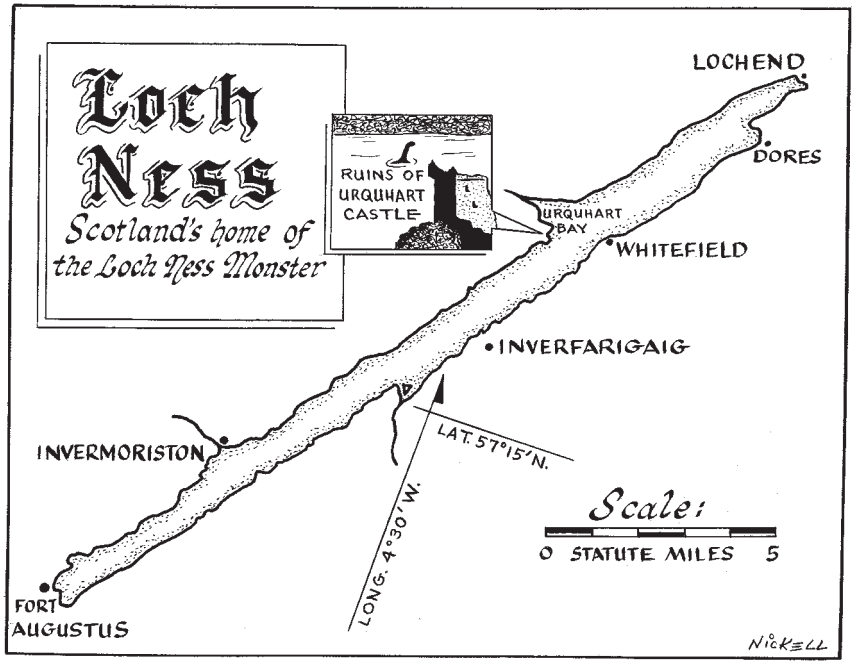


Figure 1.1 Scotland's Loch Ness is home to the world's most famous legendary lake creature. (Map by Joe Nickell)

by Captain John Macdonald, who responded: "In the first place, it is news to me to learn, as your correspondent states, that 'for generations the Loch has been credited with being the home of a fearsome monster.' I have sailed on the Loch Ness for fifty years, and during that time I have made no fewer than 20,000 trips up and down Loch Ness. During that half-century of almost daily intercourse with Loch Ness I have never seen such a 'monster' as described by your correspondent." Captain Macdonald *had* seen "what at first might be described as a 'tremendous upheaval in the Loch,'" but he ascribed this "very ordinary occurrence" to "sporting salmon" (quoted in Binns 1984, 16).

Nevertheless, more sightings soon followed, with the monster being variously described as 6 to 125 feet long, with shapes ranging from that of a great eel to a creature with a hump or humps (up to nine), and in colors including silver, gray, blue-black, black, and brown (figure

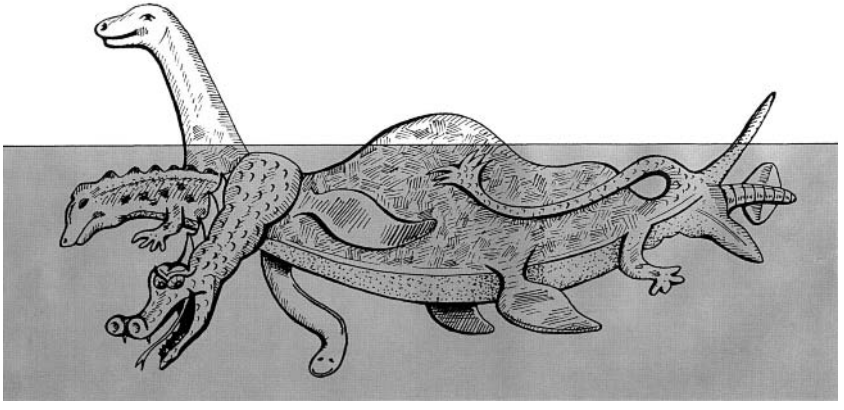


Figure 1.2 Composite drawing from the wildly diverse descriptions of the Loch Ness monster (a.k.a. "Nessie"), or herewith dubbed *Nessiteras chameleonopteryx.* (Illustration by Joe Nickell)

1.2). It was also endowed—or not—with such features as fins, flippers, mane, tusks, or horns (Binns 1984; Gould 1934).

In his definitive, skeptical book on the subject, *The Loch Ness Mystery Solved,* Ronald Binns (1984) cataloged many of the live creatures and inanimate objects that have been mistaken for Nessie, including bobbing logs, boat wakes, schools of fish, long-necked birds, swimming deer, and many other animals, notably the European otter *(Lutra lutra).* With its long neck and plesiosaurlike profile, the otter is quite likely to be perceived as a monster, especially when an adult with two or more young are swimming in a line, creating the semblance of a multihumped creature.

In August 1933, eight weeks after the sighting reported by Campbell, a Mr. Spicer saw a creature like "a pre-historic animal" cross the road about fifty yards in front of his automobile. It was carrying a small animal in its jaws, and its long neck undulated as it walked. Spicer estimated it as six to eight feet long and speculated that it might be both a "land and water animal." Indeed, as one of Spicer's contemporaries told the *Inverness Courier,* the creature was almost certainly a large otter, possibly carrying one of its young (Binns 1984, 19–20).

Monster enthusiast Rupert T. Gould, author of *The Loch Ness Mon-*

ster (1934), loved to cite the most unlikely theories about Nessie. The more ridiculous these were, the more he seemed to like discussing them (making, as it were, a straw-monster argument). On Gould's list were mass hallucination, a hollow log "inhabited by a colony of aquatic creatures," "the reflection on the water of some object on one of the surrounding hills," the action of an underwater geyser, various saltwater creatures (e.g., shark, sunfish, ray, or squid) that somehow found their way into the loch (but could not survive there), and many other imaginative possibilities—including a dead elephant. One of Gould's methods of dismissing even likely explanations for some of the sightings was by invoking other sightings that could not be so explained—as if there could be only a single explanation for Nessie (e.g., Gould 1934, 117).

In 2001, Italian geologist Luigi Piccardi suggested that the loch leviathan could be an illusion created by seismic activity, since the Great Glen Fault runs along Loch Ness. Nessie hunter Adrian Shine responded that Piccardi's hypothesis could account for only some of the monster reports, and he insisted that boat wakes were the most persistent explanation for lake monster sightings. He also noted that water on the surface could actually flow against the wind, creating the illusion that an inanimate object, such as a log, was an animate one swimming into the wind (Barr 2001).

HOAXES

Not surprisingly, hoaxers as well as tourists have been attracted to the purported monster. One hoax involved the appearance of monster tracks curiously resembling those of a hippopotamus. Indeed, they had been produced using a cast made from a hippo's hoof, apparently taken from an umbrella stand (Nickell 1995, 241–43).

Hoaxing was also the apparent explanation for the July 2003 discovery on the loch's shore of a fossil vertebra that was believed to be that of a plesiosaur (an extinct marine reptile). Although the fossil was authentic, it was embedded in a limestone that was not native to the area. National Museum of Scotland paleontologist Lyall Anderson speculated that the fossil had been planted at the loch to suggest that it

came from a Nessie skeleton. The total absence of skeletal evidence is a recurring argument against lake monsters' existence (Radford 2003).

The tradition of such Loch Ness hoaxes continues to the present day. In 2005, several new Nessie hoaxes surfaced. The most interesting was a reputed monster tooth that was found embedded in a deer carcass along the lakeshore by two American college students. The tooth was reportedly confiscated by a Scottish game official, creating whispers of a conspiracy. The "monster tooth" was later revealed to be part of a deer antler, and the whole thing was just a publicity stunt for a new novel about the loch (Boese 2005).

Fake photos of the monster abound as well, possibly including the first one, presented in 1933—just six months after the Campbell-reported sighting. It was taken by Hugh Gray, a man described as a "leg-puller," and it depicts "a blurred and indistinct serpentine shape" (Binns 1984, 98, 209). One pro-Nessie writer, Tim Dinsdale, conceded: "It does not show very much of anything. The print has either been touched up, or light has spoiled the picture. There are other features in it which are peculiar" (quoted in Binns 1984, 99). But what about the most celebrated photograph of the Loch Ness monster?

THE FAMOUS PHOTOGRAPH

In April 1934, the quintessential photo of Nessie was allegedly snapped by London gynecologist Robert Wilson (figure 1.3). Known as the "surgeon's photograph," it is the most famous depiction of the creature, showing it with a long neck and small head, somewhat resembling a plesiosaur, silhouetted against the sunlit water. A second photo by Wilson was of relatively poor quality.

Over the years, Wilson seemed to tire of the controversy he had stirred up, telling one journalist that he had never claimed to have photographed a monster and that, moreover, he didn't believe in the creature. Subsequently, Wilson's youngest son "bluntly admitted that his father's pictures were fraudulent" (Binns 1984).

Then in 1994, two Loch Ness researchers made news when they provided information that the photos were indeed a hoax, that they

Figure 1.3 The famous "surgeon's photo" of Nessie, taken by London gynecologist Robert Wilson in April 1934, has been revealed as a hoax. (Photo by Robert K. Wilson)

depicted a model made from a toy submarine to which a neck and head fashioned of wood putty had been affixed (Nickell 1995). The researchers' source was the late Christian Spurling, who, two years prior to his death in late 1993, told how the prank had been conceived by his stepfather, Marmaduke Wetherell, with Dr. Wilson agreeing to take the photos (Genoni 1994).

Subsequently, Richard D. Smith (1995), writing in *Fate* (a magazine that promotes belief in the paranormal), claimed that the hoax itself was a hoax, that Spurling's story did not ring true. Smith insisted that the uncropped photograph shows that it was not taken in "an inlet where the tiny ripples would look like full-sized waves," as alleged, and he raised other objections. For example, he noted that an estimate of the scale based on the presumed size of the ripples argues that the creature was larger than the model Spurling described. He also cited the implausibility of the explanation of why the model no longer exists:

"Supposedly because the water bailiff [Alex Campbell] appeared and Wetherell quickly stepped on the toy, sinking it." Smith's credibility was not helped by the placement of his article—sandwiched between a testimonial, "My Glimpse of Bigfoot," and an article suggesting that "alien technology" was responsible for the strange hybrid creatures of Greek mythology.

It seemed to me that Smith's points ranged from the weak to the dubious, but I decided to solicit a more expert opinion. I therefore wrote to Ronald Binns in 1995, and he responded with a detailed three-page letter. He began by conceding that Smith's perceived faults with Spurling's story might suggest that the hoax was bogus. However, he noted:

> On the other hand, as Spurling was an old man when he was interviewed maybe he was just confused. After more than half a century anyone's memory would surely be unreliable. Maybe he was right about how the model was made but wrong about the dimensions. Maybe the model sank accidentally (as did the hugely expensive model monster made for the Billy Wilder film *The Private Life of Sherlock Holmes*).
>
> Even if the object was 1.2 metres high, so what? It could still have been a model. My own fake Nessie (Plate 3 of *The Loch Ness Mystery Solved*) was a tiny cardboard cut-out head and neck stuck in the neck of a mineral-water bottle and covered in black plastic from a garbage bag (about 12" out of the water). It took ten minutes to make. I don't doubt the Wilson model was better constructed. In the Wilson photo the dark shapes to the left and right of the head and neck could very well be the top portion of a toy submarine.
>
> The second Wilson photograph obviously portrays a different object photographed in different weather conditions (and I suspect from a different angle). It may have been a cruder model, or it may have been a bird. If it is "rarely seen," as Smith claims, that is because it is a bad photo of a very dubious object. Since it obviously isn't the object shown in the more fa-

mous photo, the obvious question is how did Wilson manage to photograph two monsters?

Binns (1995) continued:

> Black and white photographs are so much easier to fake than colour photographs, and still photographs are so much easier to fake than home-movie or video film. The fact that the object shown in Wilson's photograph is very close to the shore is itself very suspicious, as this is just what one would expect from a model thrown into the loch. There is also almost what amounts to a basic rule about Nessie photos and films. The photos, being fakes and/or models, are always of an object relatively close to the photographer. The movie film, being genuine footage of an object which is not a monster, is always too far away to be properly identifiable.
>
> Richard D. Smith is wrong about the object not being photographed in an inlet. The part of the loch where Wilson said he took his photo consists of a series of inlets and there is no reason to suppose it wasn't photographed in one of these inlets (the promontories of which would not have shown in the Wilson photo). Now that we have most of the original print what is surely striking is how the object photographed is more or less dead centre—rather too neatly and well composed for what is alleged to be an animal photographed by chance.
>
> Lastly, there is the curious anomaly of the date. Wilson told the *Daily Mail* he took the photograph on April 19th (1934). However, in Rupert Gould's book *The Loch Ness Monster* (1934) the date is given as April 1st. Perhaps this was a misprint, or perhaps the information came from Wilson and was his way of signalling that the photo was a leg-pull (since in Britain April 1st is "All Fool's Day" when leg-pulling and practical jokes are the order of the day and even the newspapers carry deliberately bogus stories as a joke).

Binns concluded with some philosophical thoughts:

> I suspect after all this time we are never going to find out the full facts of the Wilson photo. The telling case against this and all the other Nessie photos is that in later years no one has ever managed to film the objects shown in either colour film, on a home-movie or on a video. The only photographic evidence from the loch which is at all intriguing is the Raynor film of 1967, and that, in my opinion, shows an otter or otters.
>
> I was interested to read in the last edition of Nicholas Witchell's *The Loch Ness Story* that he had discovered that the famous Lachlan Stuart photograph was a hoax involving bales of hay covered in tarpaulin. What has probably been lost sight of over the years is the impact which the Wilson and Stuart photographs had on monster-hunters back in the 1960s and 1970s. In those days we all firmly believed that they were genuine photographs and that the monster was indeed a very big animal with a long giraffe-like neck, capable of transforming itself into a three-humped object.
>
> My impression from a UK perspective is that interest in Nessie has ebbed in a big way since the 1970s, and nowadays people interested in mysteries are far more likely to go in pursuit of crop circles (which from a sociological perspective has many curious parallels with the Loch Ness monster saga).

In addition to Binns's review, another critique of the Spurling story comes from an excellent book, *Bizarre Beliefs,* written by Simon Hoggart and Mike Hutchinson (the latter is *Skeptical Inquirer* magazine's official and indefatigable representative in the United Kingdom). Citing arguments against Spurling's account—for example, that the toy submarine would have been unable to carry the weight of the neck and head and the lead ballast strip used to keep the model stable—Hoggart and Hutchinson (1995) state: "given an explanation which fits virtually all the facts, and meshes in so neatly with what we know of Duke Wetherell (and the gullibility of tabloid newspaper editors) it seems

positively perverse not to accept the Spurling account." (Wetherell had perpetrated the previously mentioned hoax involving a set of "monster tracks" made by a hippo hoof.) Hoggart and Hutchinson point out that, in all probability, "The dark patch in front of the neck, often described as a 'flipper,' was in fact the deck of the [toy] submarine." Aside from the Spurling claim, the authors of *Bizarre Beliefs* go on to say:

> To be fair, very few people who have examined the Loch Ness legend, with the exception of the most dedicated believers, ever doubted that this picture was a hoax—or at least that it showed something other than a monster. There were many possible explanations: the shape of the head and neck had been cut out and stuck to a bottle which had been floated on the loch; perhaps it could have been a log, a bird or an otter's tail. In any event, though there was nothing else in the picture to judge how big the object was, it was clear that the size of the ripples around the neck didn't match the bulk of a full-size monster. These ripples were also consistent with something which had been dropped into the water rather than one which had risen up from underneath. It was pretty clear to reasonable observers that if there was a monster, its most famous portrait was of something else. (Hoggart and Hutchinson 1995)

OTHER PHOTOGRAPHS

The many other apparently hoaxed photographs of Nessie include one taken in 1951 of a three-humped monster—or, rather, three misaligned and unnatural-looking humps. The monster they supposedly belonged to was unseen and left no wake.

Another photo showing two humps of different sizes was taken in the water beside Urquhart Castle in 1955, but there are two versions of the photograph, prompting monster-hunting professor Roy Mackal to ask: "If the object did, indeed, appear on the water in the original negative exposed of the scene, why was it necessary to rephotograph the

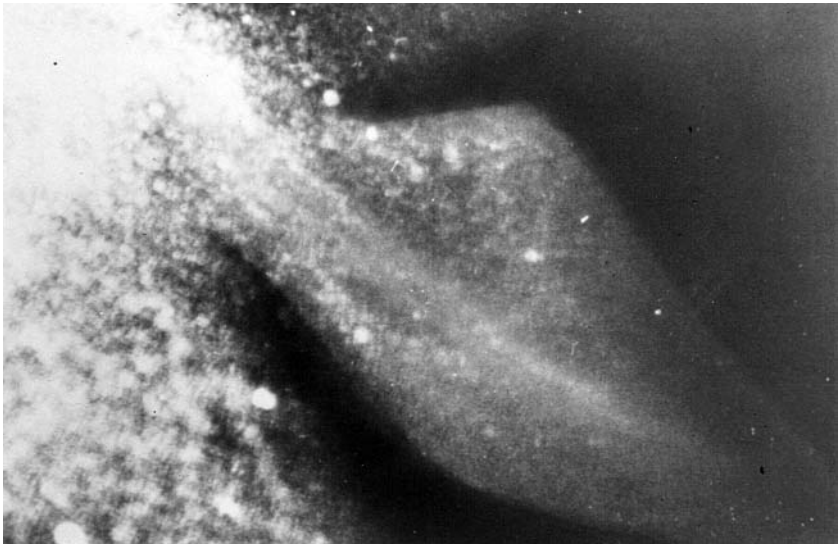
'original' print, with the resulting two different versions?" (quoted in Binns 1984, 99–100, 102).

And then there are the photographs of the Loch Ness monster and other lake denizens attributed to Tony "Doc" Shiels. Here, perhaps, we must consider the source: Shiels, a magician, self-described "psychic entertainer," and professional Punch and Judy man, is also the author of books on successful hoaxing techniques. He told one magazine, "I am sure Nessie appeared as a result of my psychic powers" (Nickell 1994; Chorvinsky 1993). Shiels has also offered photos of the "Lough Leane aquatic monster," allegedly made near Killarney Island in 1981, and of a sea serpent named Morgawr. Unfortunately, these two double-humped, long-necked creatures are "strikingly similar," possibly, according to one researcher, "shot using the same technique, that of a sculpted plasticine monster stuck onto a pane of glass in front of the camera" (Chorvinsky 1993).

Still other Nessie photos may not be hoaxes but depict some natural object, such as driftwood or a swimming deer. A motion picture film taken in 1960 by monster hunter Tim Dinsdale was analyzed by the Royal Air Force's Joint Air Reconnaissance Intelligence Center, which concluded that the moving object, seen from a mile away, could be a motorboat. Indeed, Dinsdale reported that the object was a reddish brown color, to which Binns responded in *The Loch Ness Mystery Solved*: "An object which appears reddish brown at such a distance is clearly something which is relatively brightly coloured. Reddish brown is a reasonable color for a motor boat, but an unusual one for a Loch Ness monster" (Binns 1984, 107–25).

UNDERWATER SEARCHES

An underwater photo taken in 1972 by Robert Rines and a crew from his Academy of Applied Science garnered considerable media attention for its supposed depiction of a "flipper" from an unknown creature. As it happens, the computer-enhanced picture was found to have been "significantly altered to give the impression of the flipperlike objects that appear in the published version" (Razdan and Kielar, 1984–85). The



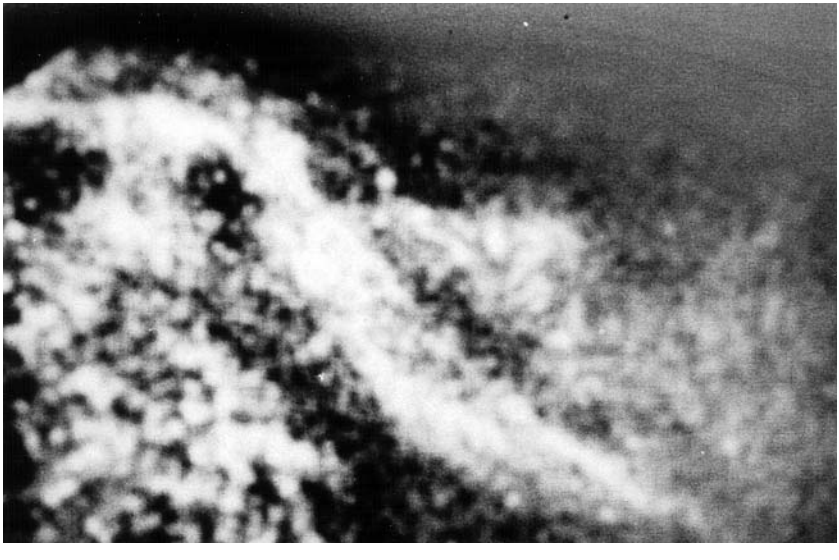


Figure 1.4 Underwater picture supposedly of a monster's flipper, made in 1972 by Robert Rines (above), was heavily enhanced. The unenhanced picture (below) isn't proof of anything. (Photos courtesy of the Academy of Applied Science)

unaltered picture could depict virtually anything (figure 1.4). In addition, the academy's sonar evidence, which Rines cited as supporting his interpretation of the "flipper" photograph, was discredited by an expert review (Razdan and Kielar, 1984–85).

Defensively, Rines told *60 Minutes II* (December 5, 2001): "I'm crazy, I'm crazy. You know Christopher Columbus; I'm nowhere near the great man he was, and he was told by all the people who knew everything about science, everything about geography, 'Don't go Chris, you're gonna drop off the end of the flat earth.'" He added, "Sometimes too much knowledge prevents you from even looking."

In 2003, a team sponsored by the British Broadcasting Corporation (BBC) surveyed the entire loch "using 600 separate sonar beams and satellite navigation technology." The team speculated on how a marine reptile like the plesiosaur, which became extinct with the dinosaurs, might have survived in Loch Ness's cold waters. The researchers studied the habits of such marine reptiles as leatherback turtles and crocodiles to determine how a plesiosaur might have behaved. According to a press release (BBC 2003), "They hoped the instruments aboard their search boat would pick up the air in Nessie's lungs as it reflected a distorted signal back to the sonar sensors." Although the team did locate a submerged buoy used to test the equipment's capacity, they found no trace of the fabled monster. Reported one of the searchers, "We went from shoreline to shoreline, top to bottom on this one, we have covered everything in this loch and we saw no signs of any large living animal in the loch." A colleague added, "We got some good clear data of the loch, steep sided, flat bottomed—nothing unusual I'm afraid. There was an anticipation that we would come up with a large sonar anomaly that could have been a monster—but it wasn't to be" (BBC 2003).

To test people's perceptions, the BBC team secretly raised a fence post in front of a group of tourists. Although most later said that they had seen a squarish object, several who were asked to make sketches drew "monster-shaped heads" (BBC 2003).

Another search was conducted later that year by Lloyd Scott, who completed a twenty-six-mile, twelve-day walk along the loch's bottom to raise money for children suffering from leukemia. Wearing an old-

fashioned diving suit from the 1940s, fitted with a metal helmet that weighed forty pounds, Scott reported not a single sighting of Nessie, instead describing the experience as "very cold and very lonely" (Loch Ness 2003).

CONCLUSION

Despite these and other extensive searches over the years, no authentic trace of the monster has ever been discovered. As *Time* magazine once reported, there would have to be at least twenty animals in a "breeding herd" for the species to continue reproducing over the centuries (Myth 1972).

REFERENCES

Barr, Robert. 2001. Tremors get credit for Nessie. *Albuquerque Journal,* June 28.

BBC "proves" Nessie does not exist. 2003. Release from BBC News. http://news vote.bbc.co.uk.

Binns, Ronald. 1984. *The Loch Ness mystery solved.* Buffalo, N.Y.: Prometheus Books.

———. 1995. Letter to Joe Nickell, December 11. Quoted in Nickell 1996.

Boese, Alex. 2005. Loch Ness monster tooth. Museum of Hoaxes Web site. www. museumofhoaxes.com/hoax/forum/forum_comments/2964/.

Chorvinsky, Mark. 1993. Our strange world: The Lough Leane monster photograph investigation. *Fate* (March): 31–35, (April): 31–34.

Genoni, Tom. 1994. After 60 years, the most famous of all the "Nessie" photos is revealed as a hoax. *Skeptical Inquirer* 18, no. 4 (summer): 338–40.

Gould, Rupert T. 1934. *The Loch Ness monster.* London: Geoffrey Bles. Reprint, Secaucus, N.J.: Citadel Press, 1976.

Hoggart, Simon, and Mike Hutchinson. 1995. *Bizarre beliefs.* London: Richard Cohen Books, 196–99.

Loch Ness is cold at the bottom. 2003. *Albuquerque Tribune,* November 10.

Myth or monster. 1972. *Time* 20:66.

Nickell, Joe. 1993. *Looking for a miracle.* Amherst, N.Y.: Prometheus Books.

———. 1994. *Camera clues: A handbook for photographic investigation*. Lexington: University Press of Kentucky, 170–71.

———. 1995. *Entities: Angels, spirits, demons, and other alien beings*. Amherst, N.Y.: Prometheus Books.

———. 1996. Nessie hoax redux. *Skeptical Briefs* 6, no. 1 (March): 1–2.

Radford, Benjamin. 2003. Extensive Loch Ness search by BBC team yields no monster. *Skeptical Inquirer* 27, no. 6 (November–December): 7–8.

Razdan, R., and A. Kielar. 1984–85. Sonar and photographic searches for the Loch Ness monster. *Skeptical Inquirer* 9, no. 2 (winter): 147–58.
Smith, Richard D. 1995. The classic Wilson Nessie photo: Is the hoax a hoax? *Fate* (November): 42–44.

This page intentionally left blank

2

Lake Champlain

Termed North America's Loch Ness monster and known affectionately as "Champ," the legendary Lake Champlain monster reportedly haunts those waters. Lake Champlain was formed roughly ten thousand years ago when an estuary of the Atlantic Ocean, the Champlain Sea, was transformed by receding glaciers into an inland, freshwater body (Zarzynski 1984a). This lake—and some say the creature, too—was "discovered" in 1609 by Samuel de Champlain. Since then, the 125-mile-long lake, situated between New York and Vermont (with 6 miles extending into Quebec), has received much attention (figure 2.1). In 1873 and 1887, showman P. T. Barnum offered huge rewards for the monster—dead or alive (Zarzynski 1984a, 83). More recently, there has been much cryptozoological interest and the development of a burgeoning Champ industry.

Proliferating sightings, "theories" of self-styled monster hunters, and even a Holy Grail photo of the supposed beast have spawned innumerable newspaper and magazine articles, books, entries in paranormal compendia, and radio and television segments, as well as key chains, mugs, T-shirts, and other paraphernalia, not to mention the "Champburger" (a seafood patty on a sesame seed bun). Such endeavors have made Champ the best-known lake monster in the United States and, except for British Columbia's "Ogopogo" (see chapter 7), in all of North America. "Few cryptozoologists deny the possibility of Champ's existence," states W. Haden Blackman in his *Field Guide to North American Monsters* (1998), "and many openly accept the creature," believing it to be a plesiosaur, zeuglodon, or other unknown or erstwhile extinct

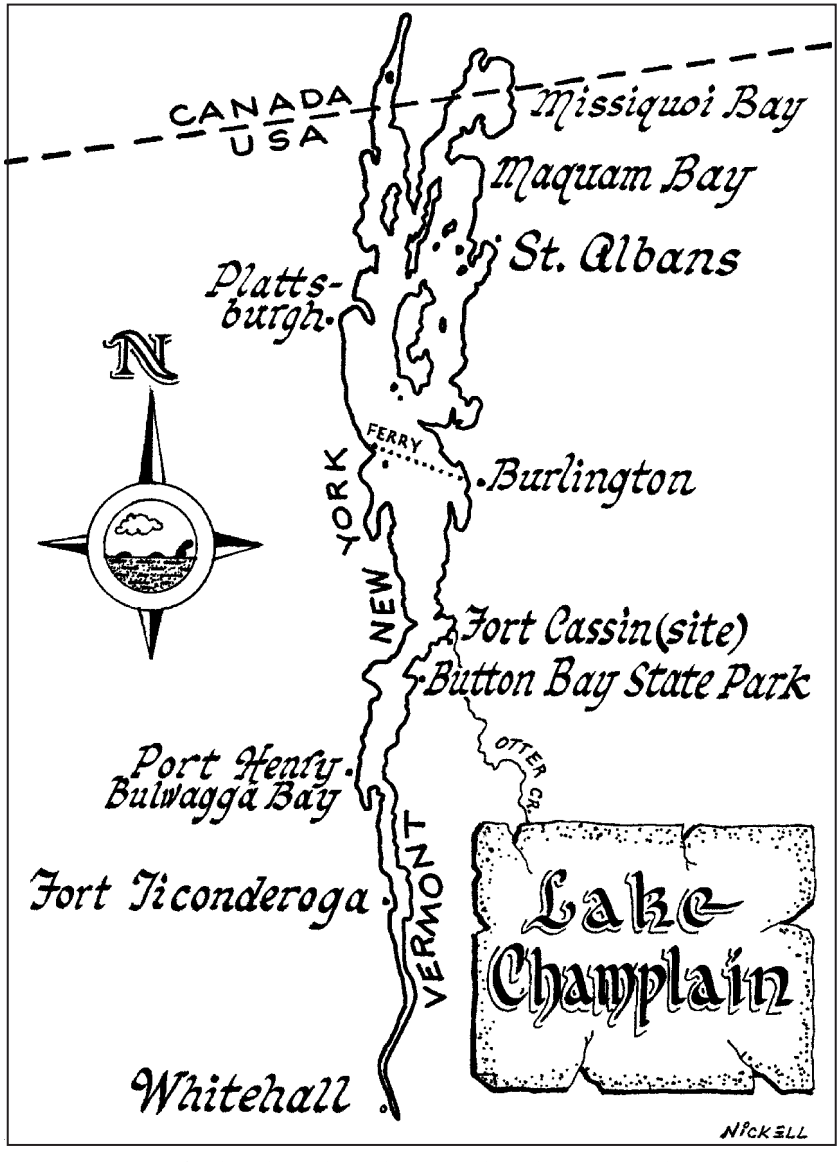


Figure 2.1 Map of Lake Champlain, showing selected sites. (Map by Joe Nickell)

creature. Champ seeker Joseph Zarzynski has even given it a name: *Beluaaquatica champlainiensis,* or "huge water creature of Lake Champlain" (Owen 1982).

To assess the reputed phenomenon, the two of us launched our own investigation in the summer of 2002 to examine all aspects of the Champ legend. Unlike some so-called investigations—which, though long running, were largely attempts to collect sighting reports—we believe ours to be the most wide-ranging, hands-on investigation of Champ ever conducted with an intent to solve, rather than promote, the mystery.

The Champ Expedition

Joe Nickell

Our investigation was multifaceted. I made an advance trip (August 2–4, 2002) to take in the annual Champ Day celebration (August 3) in Port Henry, New York, interview various people, buy books, and otherwise scout resources and make plans for our subsequent two-man expedition planned for August 22–26.

In the interim, we both studied the myriad articles and books on Champ and other alleged lake monsters. Ben Radford did extensive work to ready experiments regarding a famous 1977 Champ photo taken by Sandra Mansi, while I located her by phone, arranged for an interview, and borrowed a vintage camera (from photo expert Rob McElroy) like the one Mansi had used. We discussed options, drafted itineraries, obtained and readied gear, and made other preparations.

With a fully loaded car, we set out for Whitehall, New York. There we met friend and fellow researcher Robert Bartholomew and his brother Paul (a cryptozoologist) and discussed many relevant issues with them. Then we began to explore Lake Champlain from its southernmost tip near Whitehall to its northern end in Quebec. Our base camp for the next two days was Collins Cabins at Port Henry. Late that first afternoon, we set up Champ Camp I at a boating ramp area just outside Bulwagga Bay, the locale of the majority of Champ reports, and maintained a watch from 7:00 to 8:30 p.m. (figure 2.2)—a supposedly

Figure 2.2 Benjamin Radford maintaining a Champ vigil. (Photo by Joe Nickell)

Figure 2.3 Champ monster sighting board at Port Henry, New York, the "home of Champ." (Photo by Benjamin Radford)

prime time for Champ sightings (Kojo 1991). Unfortunately, Champ was a no-show.

We later conducted research at the Collins Cabins bar. Ben took notes while I asked a group of men about a local signboard that lists Bulwagga Bay Champ sightings in six columns of names and dates (figure 2.3). One man, William "Pete" Tromblee, quipped that it was "a list of the local drinkers." In fact, Tromblee's own 1981 sighting is listed, and he assured us that he was entirely sober at the time. He admitted that he did not know what he had seen and volunteered that it might have been a large sturgeon—a refrain one hears quite often. The proprietor, Rita Collins, rummaged through a drawer behind the bar and came up with some related newspaper clippings, including one with a photo of a "six-foot piece of driftwood that bears a striking resemblance to artists' conceptions of Lake Champlain's legendary monster, Champ." (See figure 2.9, later in this chapter.)

The following day (August 24) we crossed the Champlain Bridge to Vermont. We explored the lakeshore around Otter Creek, dropped in on the naturalist at Button Bay State Park, and then proceeded to Bristol to keep our appointment with Sandra Mansi regarding her famous snapshot (discussed in detail later in this chapter).

We subsequently rendezvoused with Norm St. Pierre, a veteran fisherman and lake guide who operates Norm's Bait and Tackle at Crown Point, New York (a few miles south of Port Henry). Outside his "One-Stop Hunting and Fishing Supply Store" rests a giant hook baited with a large rubber fish and waggishly labeled "Norm's Champ Rig." Norm was to be our guide, aboard his sonar-equipped Starcraft cruiser, to Champ's reputed lair (figure 2.4).

The sonar Norm uses to locate schools of fish soon picked up a twelve- to twenty-pound catfish or sheepshead. However, on our entire tour of Bulwagga Bay and many miles beyond, we saw nothing, either visually or on sonar, that could be construed as Champ, with the exception of one unidentified "hump" (see figure 2.5). That's not surprising, given that during more than four decades on the water, Norm has never seen a giant enigmatic lake creature. He has occasionally encountered a wave on calm water that puzzled him and, like others, says there's

Figure 2.4 Norm St. Pierre, veteran fishing guide, aboard his sonar-equipped boat. (Photo by Joe Nickell)

Figure 2.5 Strange dark hump on the lake: monster or rock? You decide. (Photo by Joe Nickell)

"something" out there. But he's more likely to suggest a sturgeon than an unknown or extinct creature.

Early in the morning we closed our base at Port Henry and, again crossing into Vermont, made our way to St. Albans and beyond. We searched the areas of Maquam and Missiquoi Bays in the hope of finding a landscape that matched the location of the Mansi sighting. Unfortunately, her description was so vague as to be almost useless, and in any case, the intervening years could have changed the scene completely. This precluded one set of photographic experiments, but we located a suitable area for others, near a boat launch. By wading into the water, Ben discovered that it was surprisingly shallow for more than 150 feet offshore. This was fortuitous, since we would not have to use the raft we had brought, but it raised an interesting point. A local man who had resided there for thirty years said that the general shallowness of the lake in the surrounding area made him doubt the presence of any leviathan there. Indeed, although the lake reaches depths of up to 400 feet, the maximum for all of Missiquoi Bay is 14 feet. And for the eastern edge of Maquam Bay and the connecting area of lake, the offshore depth at Mansi's estimated sighting distance of 150 feet is 12 feet or less, as shown by a Lake Champlain hydrographic contour map (Lake n.d.).

The experimental work (discussed in the second part of this chapter) was time-consuming, but we were done by midafternoon and continued north to the upper end of Lake Champlain at Venise Bay, Quebec. We stopped along the way to explore and to photograph some driftwood that had piled up along the shore. We returned as far south as Burlington, Vermont, that night. Ben was glad finally to be able to wash up from his swim in Lake Champlain and treat a cut on his foot, injured on some sharp rocks during the earlier experiments.

Our final day, the twenty-sixth, was another long one. We took the ferry *Valcour* from Burlington to Port Kent, New York, traversing Lake Champlain at one of its widest places. We maintained a Champ watch, noting that some reported sightings had been made from ferries as well as other boats. A veteran deckhand told us that he often teased the children to look overboard for Champ and instructed the adults to

"go below" to the onboard snack bar that serves beer and wine, so that they might also see the creature.

Disembarking from the *Valcour,* we headed south along the west coast of Lake Champlain until we veered away on the interstate and headed for home. We had traveled more than twelve hundred miles and had obtained quantities of notes, photographs, videotapes, books, charts, and other research materials—all of which would now need careful study. Here are our findings.

SIGHTINGS

Promoters of Champ's existence often cite the same major eyewitness. According to *Discover* magazine (Teresi 1998), "The first recorded sighting of Champ dates back to July 1609, when Samuel de Champlain claimed he saw a '20-foot serpent thick as a barrel, and a head like a horse.'" This quotation from Champlain—which has been repeated, paraphrased, and embellished with Indian legends (e.g., Coleman 1983; Green 1999)—is, alas, bogus. Jerome Clark, who was once taken in by the claim (1983), reports that it is "traceable to an article by the late Marjorie L. Porter in the Summer 1970 issue of *Vermont Life*" (Clark 1993). Champlain's actual description is in volume 2 of his journal (quoted in Meurger and Gagnon 1988, 268–70):

> There is also a great abundance of many species of fish. Amongst others there is one called by the natives Chaousarou, which is of various lengths; but the largest of them, as these tribes have told me, are from eight to ten feet long. I have seen some five feet long, which were as big as my thigh, and had a head as large as my two fists, with a snout two feet and a half long, and a double row of very sharp, dangerous teeth. Its body has a good deal the shape of the pike; but it is protected by scales of a silvery gray colour and so strong that a dagger could not pierce them.

As Champlain's actual account demonstrates, far from heralding a serpentine, horse-headed monster, he simply mentions a native species of

large fish. It was almost certainly a gar (or garfish), one of the Ganoidei subclass (from the Greek *ganos,* "shiny"), which includes sturgeon and other varieties.

Other supposed evidence of an early Champ sighting comes from an old powder horn bearing a Crown Point soldier's name, the year 1760, and various pictorial elements, including "a rather large dragon-like creature." Zarzynski (1984a, 52–53) suspects that this is a "possible link" to Champ. However, the figure is merely a stereotypical dragon—complete with large wings. It is by no means evidence for the existence of a Lake Champlain leviathan.

In his *Champ: Beyond the Legend,* Zarzynski (1984a, 152–205) cataloged 224 Champ reports. Putting aside Samuel de Champlain's, which never occurred, the rest are from the nineteenth and twentieth centuries. The earliest is from 1819 and is still the most sensational description of Champ ever recorded. I tracked down the original account in the *Plattsburgh Republican* published on Saturday, July 24. The sighting was attributed to a "Capt. Crum," who had been in a scow on Bulwagga Bay the previous Thursday morning. The black monster was said to be about 187 feet long, with its flat head—resembling that of a "sea-horse"—rearing more than 15 feet out of the water. The creature was some 200 yards away (twice the length of a football field) and was traveling "with the utmost velocity" while being chased by "two large Sturgeon and a Bill-fish." Nevertheless, the captain was able to notice that it had three teeth, large eyes the color of "a pealed [*sic*] onion," a white star on its forehead, and "a belt of red around the neck." The outlandishness of the incident suggests that someone was pulling the reader's leg.

Hoax or not, *that* monster has not been seen since, or it has apparently shrunk to a fraction of its former self and lost its distinctive markings, although not without gaining others. According to the various reports, Champ is between 10 and 187 feet long; it has one to four or more humps, or up to five arching coils; it is black, or has a dark head and white body, or is gray, black and gray, brown, moss green, reddish bronze, or other colors; and it is possibly drab or shiny, scaly, or smooth—even "slimy." Moreover, it possesses fins, a pair of horns,

"moose-like antlers," "elephant ears," a tan or red mane, glowing eyes, or "jaws like an alligator"—or none of these. Overall, it looks like a great snake, "a large Newfoundland dog," "a steam yacht" (but traveling too fast to be one), a horse, a Florida manatee, a submarine periscope, a whale, and so on (Zarzynski 1984a, 152–205).

Astonishingly, some writers have concluded that there is a "surprising degree of correlation between all the various descriptions" (Grant 1992, 115) or that they are "disturbingly similar" (Vachon 1977). However, to the rest of us, it appears that either Champ is a metamorphosing, contortionistic, chameleonlike creature, completely unknown to the natural world, or else eyewitnesses are viewing—and no doubt misperceiving—a number of different things.

Many of the sightings were from considerable distances—often a hundred yards or more, a few at between a quarter and three-quarters of a mile, four at one mile, and at least one at two miles away, although often the distance was unreported. A dozen observations were made by the use of spyglasses or binoculars. Since the apparent size of the creature depends on how far away it is, mistaking either the distance or the size results in misjudging the other accordingly. If we consider other factors—surprise, poor visibility (such as nighttime sightings and viewing the creature while it was entirely underwater), and other problems, including the power of suggestion—the sightings are obviously suspect.

One shouldn't underestimate the power of what Rupert T. Gould (1976, 112–13) called "expectant attention." This is the tendency of people who are expecting to see one thing to be misled by anything having some resemblance to it. For example, a log may be mistaken for a lake serpent under the right conditions, especially when reports of such a creature are common. Indeed, logs have actually been mistaken for the Loch Ness monster, and Gould (1976, 107) describes two instances in which "a pair of binoculars resolved an apparent 'monster' into a floating tree-trunk" at the loch.

Perhaps certain Lake Champlain monster sightings can be so explained. One from circa 1886, for instance, said that the monster looked "like a long log or pole," and a 1954 report described the creature as

"like a telephone pole in appearance." Photos of "monster-shaped" driftwood at Lake Champlain have been published (Zarzynski 1984a, 99, 163, 171; Champ unmasked n.d.). In this regard, local fisherman Tom Forrest (2002) told an illuminating story: In 1998, he was with a group of people who were frightened by what they thought was Champ. However, it turned out to be a partially waterlogged tree trunk, bobbing and propelled by the current. It was nearly forty feet long with a root that resembled a monster's head.

A particular feature of Lake Champlain—an effect called a seiche—may help produce such sightings. A seiche is a great underwater wave that sloshes back and forth, even though the lake's surface appears smooth. The sloshing may dislodge debris from the bottom—logs or clumps of vegetation, for example—that bob to the surface as "monsters" (Teresi 1998).

Another likely candidate for some Champ sightings is a large fish. Champlain's chaousarou—clearly a gar—is an obvious possibility. Forrest witnessed a friend hook a longnose gar that measured approximately six feet four inches long and weighed some forty to fifty pounds. He calls this "the real Champ" and has dubbed it, appropriately, "Gargantua" (Forrest 2002).

Among other large fish in the lake are sturgeon, which are now endangered. They are generally in the five- to six-foot range but can grow to twice that size (Zarzynski 1984a, 98–100; Meurger and Gagnon 1988, 47–48). In fact, one couple who saw a six-foot creature in 1949 described it as possibly a large sturgeon. Although a sturgeon's length is insufficient to account for some other Champ sightings, the size can easily be overestimated. Multiple fish can also appear to be a single monster. Ronald Binns (1984, 205–7) tells of a young man who spied a fifty-foot sea serpent off England's Brighton beach in 1857; he later became a marine biologist and realized that he had actually seen several dolphins "swimming in line." In this manner, two or more large gar, sturgeon, or other fish could easily appear to be a single multihumped monster, accounting for numerous such sightings at Lake Champlain.

Otters, which are playful and enjoy "chasing each other" and "following the leader" (Godin 1983), are especially prone to creating this

illusion and are often mistaken for lake monsters, as I discovered while investigating other cases. For example, Jon Kopp, a senior wildlife technician with New York's Department of Environmental Conservation, told me of a personal encounter in a duck blind on a lake in Clinton County. It was dark, and suddenly heading toward him was a huge snakelike creature making a sinuous, undulating movement. However, as it came closer, Kopp realized that the "serpent" was actually six or seven otters, swimming single file and diving and resurfacing to create the serpentine effect. "After seeing this," Kopp said, "I can understand how people can see a 'sea serpent'" (Nickell 2001, 102).

Otters have been mistaken for monsters elsewhere, including Loch Arkaig and Loch Ness in Scotland (Binns 1984, 186–91) and, I believe, Lake Utopia in New Brunswick, Canada, and Silver Lake in Wyoming County, New York (Nickell 2001, 133–35, 92–103), among many others. The northern river otter (*Lutra canadensis*) measures up to fifty-two inches long and is dark brown with a lighter, grayish throat and belly but "looks black when wet" (Whitaker 1996). While treading water with its hind paws, it can extend its head and long neck out of the water, inviting comparisons with the extinct plesiosaur, which is so often mentioned as a possibility for Nessie and Champ (Binns 1984, 186–91).

In light of otters, consider this Champ report: On June 15, 1983, several people saw a thirty- to forty-foot creature with four humps in Lake Champlain off the site of Fort Cassin. However, as one witness admitted to the Lake Champlain Phenomena Investigation (LCPI), "It could have been one large creature or four smaller ones" (Zarzynski 1983). This concession takes on new significance when we learn that the sighting was at the "mouth of the Otter Creek" (although it is actually Vermont's longest river, it is otherwise aptly named as a habitat for the northern river otter).

A few miles away, Button Bay State Park naturalist Laura Hollowell showed me a drawing made by a young girl who had seen a "baby Champ." Hollowell (2002) said, "People have seen otters and mink swimming in the lake and think they've seen Champ." She is "surprised at what unreliable reporters people can be in terms of wildlife sight-

ings," adding, "I don't believe that there are any large, unidentified animals in Lake Champlain."

Keeping in mind eyewitness descriptions of Champ with horns, "moose-like antlers," or a head "like a horse" (Zarzynski 1984a, 161, 165, 177), one cannot help but acknowledge other wildlife possibilities. Allowing for an overestimation of length—which is especially easy to do if there is a wake—swimming deer are an obvious explanation. Even some believers among Loch Ness monster hunters consider this the probable explanation for "horned monster" reports in their bailiwick. Indeed, when one photo of Nessie was enlarged, "she" was revealed to be a deer (Binns 1984, 45, 191–93).

Still other possibilities for Champ (and many purported lake monsters elsewhere) include wind slicks and boat wakes. A deckhand on the *Valcour* ferry told us that Champ reports had declined in the last fifteen years or so with the cessation of barge traffic on the lake. A barge's wake could travel all the way across the lake, he said, mystifying anyone who encountered it without seeing its cause and causing some people to imagine that they had glimpsed the fabled lake creature ("John" 2002).

In other sightings and photographs, additional culprits—including other swimming animals and marine creatures, long-necked birds, even rocks—may pose as a lake monster, along with toy models and manipulated images (Binns 1984; Nickell 1994). Considering all such factors, there is no compelling reason to postulate the existence of a hitherto unknown creature in Lake Champlain.

I analyzed the 224 sightings listed by Zarzynski (1984a, 152–205), minus the nonexistent 1609 sighting and nine completely undated reports. Interestingly, during the entire period before 1860, there was only a single recorded sighting—that by "Capt. Crum," which was probably a spoof. After that, recorded sightings increased in the 1870s and 1880s (to fifteen and twenty-three, respectively), then declined again before shooting up steadily in the 1960s (fifteen), 1970s (fifty-nine), and 1980s (seventy until mid-1984). The reason for the fluctuations is uncertain, but if there were several large leviathans in the lake prior to 1860, as proponents believe, why was there only one highly doubtful sighting?

Why did the Native Americans not know about the creatures and tell Samuel de Champlain about them rather than the comparatively mundane chaousarou (gar)?

As to the rise in modern sightings (which is obviously much greater than could be explained by population growth), that might be due to the heightened expectancy caused by the number of articles, books, and other media reports on the subject. Loren Coleman (1983, 89) gives some credit to "the arrival on the scene" of Joseph Zarzynski, who gave those who had previously been ridiculed "a sympathetic ear." That seems fair, but Zarzynski's and others' excessive credulity may have tipped the scales in the opposite direction, resulting in an even higher expectancy and thus helping to create something of a bandwagon effect.

This is supported by the tendency of the reported imagery to subtly conform to the concept of the day. For example, the term "sea serpent" was used in several nineteenth-century accounts but was effectively dropped afterward (except for a single journalist's use). The most prevalent descriptor overall was "huge snake" (or similar wording), but in modern times (after 1978), reports occasionally likened the creature to a "dinosaur" (Zarzynski 1984a, 152–205). This probably reflects the popular notion—after the widely circulated 1934 photo of the Loch Ness monster (Nickell 1994, 171; 1996)—that such mythical beasts resemble plesiosaurs. Michel Meurger, in *Lake Monster Traditions: A Cross-Cultural Analysis* (1988, 39), concludes that "Champ's modern fame is the product of local monster-enthusiasts in their efforts to promote their own legend along Loch-nessian lines."

CONCLUSION

Not only is there not a single piece of convincing evidence for Champ's existence, but there are many arguments against it, one of which is that a single monster can neither live for centuries nor reproduce itself. There would need to be several in a breeding herd for the species to continue to reproduce over time (Myth 1972). Zarzynski acknowledges this, theorizing that a colony of thirty or fewer plesiosaurs has inhabited Lake Champlain since its formation some ten thousand years ago

(Teresi 1998, 92). However, with so few individuals, he worries that Champ is near extinction. In contrast, fellow monster hunter Dennis Jay Hall (2000, 15) insists, "There is a healthy population of these animals living in Lake Champlain. They are here for a reason; this is their chosen home."

If so, then where is a floating or beached carcass or other certain trace of the fabled creature? Although there are possible reasons why a Champ carcass might be rare—for example, most deaths occur in winter, when the lake is largely or completely frozen over (Zug 1981)—there is no question about the existence of sturgeon, gar, otters, and other Champ look-alikes. And where are the bones that, as Gould (1976, 120) asked of Loch Ness, should have eventually covered the entire lake floor?

The burden of proof, of course, is on the claimants. Rather than meeting that burden, the Champ defenders are promoting a mystery and thereby engaging in a logical fallacy called arguing from ignorance: We don't know what these people saw; therefore, it must have been Champ. One cannot draw a conclusion from a lack of knowledge, and so, until an actual specimen presents itself, the possibility that any large, unknown animal inhabits Lake Champlain lies somewhere between extraordinarily slim and none.

Champ: Photographic and Sonar Evidence

Benjamin Radford

No live or dead Champ creatures have been found, nor any teeth, bones, or other hard evidence. Of all the types of evidence for Champ (eyewitness accounts, legends, and so on), the closest to real proof are photographic images. There are only a few photographs and videotapes purported to be of the Lake Champlain creature. The August 1982 issue of *Life* magazine featured two pictures supposedly of Champ, but they could be of just about anything in the water.

On July 7, 1988, boaters Walter and Sandi Tappan caught a possible Champ on videotape. They claimed that they were "able to see the head and neck of the animal. Sandi Tappan was particularly bemused

by the way the creature would turn its head and look her directly in the eye" (Kirk 1998, 135). Yet despite the eyewitness's firm conviction that Champ had stared at her, Champ researcher John Kirk, of the British Columbia Scientific Cryptozoology Club, examined the videotape and believes it to be "of feeding fish near the surface" (Kirk 1998, 135). What one person sees as feeding fish, another sees as obvious (and detailed) proof of a close-up encounter with Champ. Having reviewed the footage myself, I agree with Kirk that it is likely feeding fish.

Following search efforts by diver Joe Zarzynski (1982, 1983, 1984b, 1985, 1986, 1987, 1988b, 1989, 1992), the quest to find Champ was taken up in 1992 by Vermonter Dennis Jay Hall. He formed a nonprofit group called Champ Quest, whose goals include stopping the spread of zebra mussels and identifying Champ. Hall has collected numerous sighting reports and claims to have filmed Champ on several occasions. Images of Champ can be found in his book *Champ Quest: The Ultimate Search* and on his Web site. Though Hall's quest seems well intentioned, he indulges in dubious conjecture for which he offers no evidence, such as that humans have killed and eaten Champ creatures in the past (Hall 2000, 30).

Hall also claims that his father captured a baby Champ creature in 1976. According to Hall, the animal "looked like a snapping turtle would without a shell. It held its body well off the ground as it walked out of the water. The gait was that of a turtle. The tongue of the animal was forked and darted in and out as it tested the air. . . . The head was a cross between a snake and a turtle and was attached to a short neck. The body was slender with a medium length tail. The feet had five webbed clawed toes" (Hall 2000, xiii). Hall claims that the animal was preserved and sent to a nearby university that, unfortunately, was unable to identify it. The creature then found its way to a high school science department, where it remained until 1990, when it was accidentally discarded (Hall 2003). According to a writer for *Vermont Today,* another possible baby Champ was captured in 1945, when "a news story from Burlington reported: 'Baby Sea Serpent Taken in Vermont Waters—May Be Offspring of Lake Monster.' 'A 14-inch reptile, taken in Shelburne Harbor, Vt. . . . resembled in miniature descriptions of the lake sea serpent,

giving rise to the pleasant supposition that it might be an offspring of the Monster of the Deep'" (Porter 1970). The creature resembled a small alligator and was guessed to be a type of salamander.

THE MANSI PHOTOGRAPH

The best photographic evidence of Champ—indeed, of any lake monster—is that taken by Sandra Mansi in 1977. Kirk (1998, 133) states, "The monster of Lake Champlain . . . has the distinction of being the only lake monster of whom there is a reasonably clear photograph," and he considers the photo "extremely good evidence of an unidentified lake-dwelling animal." Zarzynski (1984a, 62) says that the photo is the "best single piece of evidence on Champ." Another writer, Jerome Clark (1993, 67), says, "By any standard the Mansi photograph remains a genuine mystery and a serious obstacle to any effort to reduce the Champ phenomenon to mundane causes."

With the 1993 revelation that the most famous photo of the Loch Ness monster was a hoax (see chapter 1), the Mansi photo stands alone as the most credible and important photographic evidence of the existence of lake monsters. Because the authenticity of the photograph is held in such high regard by so many writers and researchers, it seemed appropriate to take a fresh look at the evidence. Rather than relying on published accounts of the story, which are often fragmentary and contain contradictory details (see appendix 1), we went directly to the primary source, interviewing Sandra Mansi in detail and at length in August 2002.

According to Mansi, her family's encounter with Champ took place on Tuesday, July 5, 1977. Sandra and her fiancé, Anthony Mansi, along with Sandra's two children from a previous marriage, were taking a leisurely drive along Lake Champlain. They drove by some farmland and, around noon, made their way to a small bluff overlooking the lake. The two children went down to the water while Anthony returned to the car to get a camera. As Sandra watched her children and the lake, she noticed a disturbance in the water about 150 feet away. She thought at first that it was a school of fish, then possibly a scuba diver. "Then the

Figure 2.6 Sandra Mansi's 1977 photograph of a mysterious object in Lake Champlain. This image has been touted as the best evidence of the existence of lake monsters. (Copyright 1980 by Sandra Mansi, all rights reserved)

head and neck broke the surface of the water. Then I saw the head come up, then the neck, then the back."

Mansi didn't panic: "I wasn't even scared, I'm just trying to figure out what I'm seeing. Then when Tony came over the field he saw it and started screaming, 'Get the kids out of the water!'" The kids scrambled up the bank and headed toward the car. As Anthony helped Sandra up the bank, he handed her the camera. She knelt down, snapped one photo (figure 2.6), and then put the camera down to watch the creature. The Mansis estimated that the creature's neck stuck about six feet out of the water and was about twelve to fifteen feet long. The sighting lasted a remarkably long time—between five and seven minutes—during which the creature never turned to face the shore. Sandra Mansi described the neck and head as dark in color and said that what we see in the photograph is as much of the creature as she saw.

After several minutes, the head and neck slowly sank into the water and were gone. The Mansis then headed home. They didn't report the

sighting to anyone but took the unfinished roll of film to a local Photomat. The photo was tucked away in an album for four years. It then came to the attention of cryptozoologists (see appendix 1 for details about how this came about) and was published in the *New York Times* on June 30, 1981, to great fanfare. Soon after, a well-publicized Champ seminar was held to discuss the creature and the photograph. In Port Henry, New York (the self-proclaimed home of Champ), the aforementioned signboard listing Champ sightings in the Bulwagga Bay area (see figure 2.3) provides a timeline of sightings, as well as insight into how Mansi's photo (rather than her actual sighting four years earlier) likely spawned other sighting reports. Almost exactly half of the 132 sightings listed on the board (as of August 2002) are dated 1981 or 1982, immediately after the photo's release and the resultant publicity. This fact strongly argues for the "bandwagon effect," whereby widely publicized sightings lead to other reports, independent of an actual creature's presence or absence. Instead of an actual creature triggering other sightings, publicity about a "new" four-year-old photo triggered new sightings (this same effect occurred at Lake Okanagan; see chapter 7). It isn't much of a stretch to state that Mansi's photo launched the modern Champ phenomenon.

Despite assertions to the contrary, the Mansi photograph by itself is intriguing but holds almost no value as evidence. It contains little usable information; whether by accident or design, virtually everything needed to determine the photograph's authenticity (and subject matter) is missing, lost, or unavailable. For example, Mansi can't provide the negative, which might show evidence of tampering. She said she habitually threw away her negatives; they weren't lost, as others have reported. She also can't provide other photographs taken on the roll, which might show other angles of the same object or perhaps "test" photos of a known object from an odd position. Mansi is unable to locate the site of the photo, which would help determine a number of things, including the size of the object. And the photo has virtually no objects of known scale (e.g., boat, human) by which to judge the creature's size or distance. The fact that the Mansis waited four years to release the photo was also seen as suspicious. All we are left with is a

fantastic story in which the only supporting proof is a compelling but ambiguous photograph of something in the water.

Because of the litany of missing information and the high quality of the image, suspicions of a hoax surfaced almost as quickly as Champ. Such accusations were summarily dismissed by Mansi family lawyer Alan Neigher, who said that his clients "could no more have constructed such a hoax than put a satellite in orbit." Though some have suggested that Mansi tried to get rich from the photo, she proudly points out that she turned down lucrative offers from supermarket tabloids to reprint the photo. It was, she said, an issue of credibility.

Richard D. Smith, a filmmaker who was producing a documentary on Champ, offered his expert commentary on the matter of a hoax: "As a photographer and filmmaker, I can speak with some authority as to what it would take to fake a picture of this sort. Assuming the remote possibility that the Mansi photo is a fraud, it would require fabrication of an excellent, full-sized model (highly expensive in terms of expertise and materials) which would have to be smuggled out to Champlain or another lake, there assembled or inflated, and successfully maneuvered around out in the water (most difficult, especially with a slight wind blowing), the whole thing accomplished without being seen or the slightest leak in security (unlikely)" (Smith 1984).

Smith's account is nearly comical in its strained assumptions. He envisions an "excellent, full-sized model" of the Champ monster, which certainly is unlikely. But the Mansi photograph doesn't show an "excellent, full-sized model" of Champ; it shows a dark, featureless, ambiguous curved form of unknown size in the water. Surely such an object wouldn't be as difficult to fake as Smith presumes.

Other attempts to dismiss the possibility of a hoax are also strained. In his analysis of the photo (discussed in more detail later), B. Roy Frieden of the Optical Sciences Center at the University of Arizona suggested that it "would be very difficult to hoax the object," due in part to the fact that "the water is cold, therefore you'd have to have a wetsuit on, real protection from the cold water" (Frieden 1981). The photograph, however, was allegedly taken in July, and Sandra Mansi's children were playing in the water, presumably without wetsuits. During our initial

experiments at Lake Champlain (discussed later), I had the privilege of taking measurements in the lake while my co-investigator stayed warm and dry on the shore ("Champ bait," he called me). Although I was in fairly deep water, I was chilly but not uncomfortable, and I certainly didn't need thermal protection. (Though admittedly, when we re-created our experiments later for a Discovery Channel documentary, the water was somewhat colder.)

Jerome Clark (1983) asks, "If Sandra Mansi did help perpetrate a difficult, expensive hoax, why did she take only one photograph?" This simply begs the question: How do we know she took only one photograph? Just because she has shown only one to the world doesn't mean that there aren't others—perhaps ones that reveal more clues about the object. If Clark is willing to suppose for argument's sake that Mansi might lie about her story, why would he assume that she would tell the truth about how many photos she took?

One could just as easily argue that the taking of only one photo makes a hoax more likely, not less so. The one photo is intriguing enough to cause a flurry of interest in Champ but doesn't provide enough clues to allow a close analysis. The camera had more film in it; the Champ photograph wasn't the last one on the roll. In addition, Mansi says that the creature never even saw her family, so she was presumably in no danger of being detected, threatened, or chased if she had stayed to take more photos. Mansi claims that she took only one because she didn't think to take another; in hindsight, she says that of course she should have finished off the roll. But by that time, she and her family were out of the water, off the shore, and safe on a bluff 150 feet away.

However far-fetched some of the hoax dismissals are, I believe that they are fundamentally correct. In our discussions with Mansi, and after an exhaustive and detailed review of both her account and her photograph, I have come to the conclusion that she is probably an honest and sincere eyewitness reporting essentially what she saw.

Part of the reason I believe Mansi's story is that, like many real eyewitness accounts, it is flawed and partially contradictory; if Mansi had faked the whole encounter, her story would have been tailored to

be more consistent with other Champ sightings. Also, my assumption as an investigator is that, in general, eyewitnesses are truthful. Though cryptozoology is littered with hoaxes and faked evidence, I see no need to label someone a liar or a hoaxer absent strong evidence of deception. Assuming that both the account and the photo are truthful (though error-prone) records of something in the water, what can we conclude about it?

The Frieden Analysis

In 1981, B. Roy Frieden examined the photograph at the behest of Champ researcher Joe Zarzynski. Frieden's findings were outlined in his "Interim Report" and published in Zarzynski's 1984 book *Champ: Beyond the Legend.*

Frieden believed the picture to be a valid print and found no evidence of photographic tampering. However, he did find a "suspicious detail" in the picture: "When I showed it to a woman who formerly lived at Lake Champlain, she immediately noticed a brownish streak going horizontally from left to right across the picture right up to the object in question. She right out said that it looked to her like a sandbar." Frieden believed the streak to be "a real detail in the picture" and suggested that if it was a sandbar, "then there is a distinct possibility that the object was put there by someone. . . . the sandbar problem really has to be investigated." Frieden also suggested that the photograph may not have been taken where Mansi said it was: "She [the former resident] was suspicious that the lake was so narrow at that point because Lake Champlain is colossal in width, and that this would have had to take place at what's called 'The Narrows' by the natives who live around there for it to be a true photograph of the area. I say it's suspicious because if it is an uncharacteristically narrow portion of the lake, perhaps the picture wasn't taken at Lake Champlain but rather at some other body of water." The general area of the sighting is relatively shallow, and to date, the sandbar explanation remains a possibility. No evidence has surfaced that the photo was not taken at Champlain.

The LeBlond Analysis

Another analysis was conducted by Paul H. LeBlond of the Department of Oceanography at the University of British Columbia. LeBlond (1982) attempted to use the general appearance of the water's surface to estimate the length of the waves and then use that as a scale by which to judge the object in the photograph. After listing the many possible sources of error, LeBlond sums up: "The inescapable conclusion [despite all the unknowns] is that the object seen in the Mansi photograph is of considerable size." He estimated its length to be between sixteen and fifty-six feet.

LeBlond used a complex formula involving wind speed, fetch, wave period, and wave height—all of which were estimated. LeBlond did his best with the scant evidence he had to work with, but no matter how good the math or the model is, with so many unknown variables, any result will be little better than a wild guess. LeBlond's analysis, by his own admission, was imprecise: "Sources of error may appear at many stages of the estimation method, and this must be kept in mind when interpreting the results." Most writers who cite the LeBlond analysis fail to mention this important caveat and portray his results as conclusive and scientifically sound. One writer goes so far as to say that LeBlond's heavily qualified conclusions "destroyed the learned academic's [i.e., Frieden's] hypothesis that the animal could have been a fake" (Kirk 1998, 135). (Though again, I agree with Kirk that it isn't faked.)

Several years later, LeBlond applied a similar analysis to the famous surgeon's photo of the Loch Ness monster (see chapter 1). He concluded that the creature's neck extended four feet above the waterline and that "the object thought to be Nessie is therefore of a dimension which warrants all the interest it has received" (LeBlond and Collins 1987). Yet that image has since been shown to be a hoax—the pranksters using a neck only about a foot high, not four feet, as LeBlond had calculated. It now seems clear that the methods LeBlond used are not valid for estimating the size of unknown objects in water and should be abandoned.

There is one area where LeBlond's discussion is clearly wrong. He

mentions the efforts to locate the Mansi site and provides a map with a shaded area showing "stretches of shoreline from which the Mansi photograph may have been taken." The areas highlighted are on the western shores of Hog Island and below Maquam Bay across from Hero Island. Yet only someone who has never been to the area could suggest these sites as possible candidates; the far shores are much too far away to be depicted in the Mansi photograph.

Some cryptozoologists, it should be noted, were cautious about the results of the photographic analysis. J. Richard Greenwell, of the International Society of Cryptozoology, discussed the various analyses and their conclusions that "there are 'definitely no cuts, no superimposition,' but, he warn[ed], that 'does not mean it is a monster or a living object. It does mean an object was there and was photographed'" (quoted in Zarzynski 1988a, 132).

The Radford Analysis

Armed with analyses, comments, and critiques of the Mansi photo, I set out to conduct my own investigation. All the previous analyses had

Figure 2.7 The Lake Champlain monster, traced from an enlargement of Sandra Mansi's 1977 photograph. (Illustration by Benjamin Radford)

focused on just the photograph or just the sighting account. In the quarter century since the photo was first published, there had been no in-depth effort to reconcile the two and get a complete picture of the event. This seemed to be a glaring oversight for such a famous and important photo. I spent countless hours looking at the photo, trying to glean any hint or angle that might tease out its secrets. Rather than using the most often reprinted (and cropped) version of the photograph, I traveled to Connecticut to study the rarely seen original print. Mansi's lawyer, Alan Neigher, a warm and accommodating man, kindly gave me free access to stare at the thing as long as I pleased.

There are two fundamental questions about the object in the Mansi photo: Is it alive? and How big is it? There are a number of puzzling elements in the story that make little sense if the object is actually a large, living animal but need not be answered if the object is nonliving.

Morphology. In my own analysis of the Mansi photograph, I discovered something odd about the object. It isn't apparent at first glance, but the "head" and "hump" aren't clearly connected. The neck and hump of the creature (if that's what it is) are at a very unnatural

Figure 2.8 Some researchers suggest that Champ may be a plesiosaur, a marine reptile that died out over fifty million years ago. (Illustration by Benjamin Radford)

angle and position relative to each other. It's difficult to picture how the gently sloping hump on the right could be anatomically connected to the neck, which emerges from the water at about an eighty-five-degree angle. The hump slopes down toward the base of the neck just a few feet away. In his book on Champ, Zarzynski admits that the head and hump are not obviously connected. He does, however, show an "electronic heavy enhancement of the Mansi photograph demonstrating 'that the monster's back and head are connected.'" I remain unconvinced; the "heavy enhancement" seems to have done little but emphasize the dark patches—which would, of course, include the head's shadow. The neck portion doesn't align with the hump and in fact clearly emerges from the water *away* from the hump and supposed body (figure 2.7). The reason that the head and hump seem to be connected is the presence of a dark patch in the water between the two. I suggest that this is in fact a shadow from the neck and head. In the photograph, that area is not nearly as dark as the head and hump and has all the characteristics of

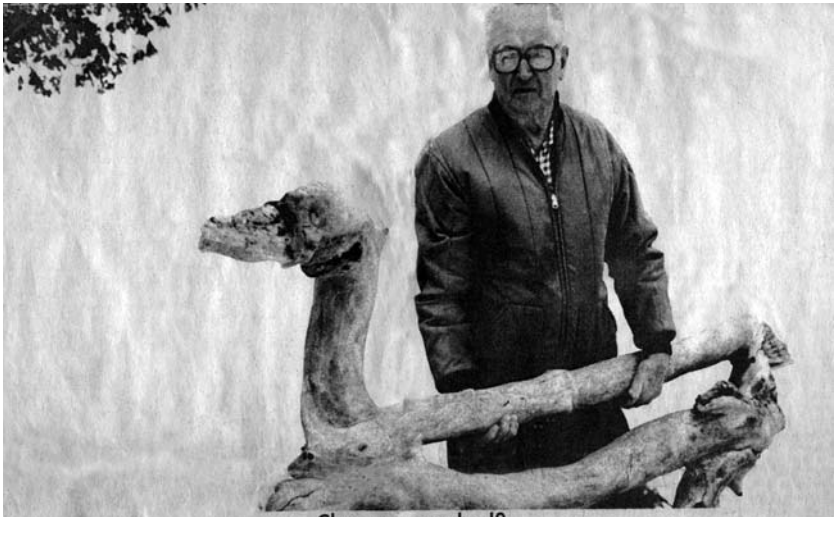


Figure 2.9 Driftwood and tree stumps can often take on strange and fantastic forms, including those of lake monsters. This six-foot piece of driftwood was found on Lake Champlain in the 1980s. (Photo by Bruce Rowland, courtesy of the *Plattsburgh Press-Republican*)

a shadow. Furthermore, Mansi's own account corroborates the shadow hypothesis. She claims that the photo was taken at around noon. If this is true, then at the lake's latitude, the sunlight should be coming from the south, casting a shadow downward and north (to the right in the photo)—exactly where the neck and hump meet.

There doesn't seem to be enough space between the base of the neck and the hump to plausibly account for the rest of the submerged body. It's hard to conceive of a large aquatic animal whose morphology would allow for such a tortuous positioning. One of the most popular candidates for Champ is a prehistoric creature called the plesiosaur (figure 2.8), but the neck length and body shape are hard to reconcile with the object in the photograph.

The object is supposedly a head and neck, yet (unlike all other known animals) there are no discernible organs—no mouth, no eyes, no nose, no ears, no sensory organs at all. It is simply a curved, ambiguous shape in the water, not identifiable as a head and neck other than by inference. It does seem to have a vaguely head-shaped tip, but a root sticking up from a partially submerged tree stump could look identical. Roots and branches can take many gnarled, twisted, and fantastic forms, and the shape in the photo wouldn't be unusual. In fact, through the years, many people have found natural roots that resemble the heads and bodies of lake monsters. One striking photo of a serpentine (but wooden) head and neck can be found on page 99 of Zarzynski's *Champ: Beyond the Legend.* Another—found near Lake Champlain—is reproduced here from an undated photo in the *Plattsburgh Press-Republican* (figure 2.9).

Behavior and Movement. Unlike other animals, the lake "creature" was oblivious to noise and movement. Despite two children playing in the water less than 150 feet away and a grown man shouting at it, the "creature" didn't turn its head toward the source of the sound and was apparently unaware of the four humans directly behind it. As Mansi reported, "It did not even look our way—and the kids were loud, they were having a great time. . . . It didn't know I was there. I'm sure it didn't." This detail strongly suggests that the object Mansi saw was nonliving. Sound travels more than four times faster in water than in air,

and some whales can hear sounds at distances of twenty miles or more. A living creature of the presumed size and complexity of Champ should certainly be able to hear and sense two young children splashing and playing nearby. Mansi attributes Champ's distinctly unusual behavior to deafness: "I really don't think it could hear because wouldn't you think that if it heard the children [it would turn its head to face us]?" A simpler explanation is that the object couldn't hear because it was nonliving.

Mansi said that the creature, after surfacing six to eight feet out of the water, turned its head, apparently looking over the countryside. But what would an aquatic animal be doing scanning the shoreline and surrounding area? Animals that live in the water are unlikely to have good terrestrial vision for the distances described. Sea turtles, for example, have excellent eyesight underwater but are nearsighted on land. The idea that Champ would stick its head up to "have a long look around" (except toward the loud noises behind it) seems extremely unlikely.

The creature held its head out of the water and was essentially stationary for "at least five to seven minutes." Even given the fact that eyewitnesses tend to overestimate the duration of sightings, this is a remarkably long time for any large, living creature to remain essentially motionless. Large animals in the wild rarely stay immobile for long periods unless they are sleeping or eating. The majority of Champ sightings last less than a minute—often only a few seconds. If the Champ creatures (and there would have to be dozens to constitute a breeding population) habitually stick their necks six feet or more out of the water for five minutes or longer (whether people are nearby or not), it's amazing that they aren't sighted routinely.

The object's movements were not characteristic of an animal. From Mansi's description, the head and neck were always more or less fixed in the same position. Although the head was said to move to some degree, it did not, for example, slide back or around as a snake's head might. The object moved more like a stiff, stationary object turning slightly on its axis than like a flexible, pliable neck or appendage. Many reports—including Mansi's—specifically point out that Champ "sank—it did not dive—under the water" (e.g., Clark and Pear 1995, 433). This is an

interesting characteristic, and *exactly* the behavior one would expect from a protruding root or branch of a partially submerged tree being roiled by waves: a necklike object sinking back into the water instead of diving forward.

Mouth. There is only one specific detail in Mansi's account that argues for a living creature and against a root or a tree: the presence of a mouth. Mansi said, "I could see that it was living. I could not see detail . . . I remember the mouth was open when it came up and water came out." This feature is indeed hard to reconcile with a stump or a log. But later during our interview, Mansi contradicted herself: "When it came up, its mouth was closed, but you could see water [coming from the head]." This suggests that she only *inferred* the presence of a mouth. Since Mansi was interpreting the top of the "neck" as a head, this is a perfectly reasonable and perceptually sound assumption. Given that she thought she was seeing a creature's head, her mind supplied the rest. The process by which the human mind fills in perceptual details that

Figure 2.10 In field experiments on Lake Champlain, investigator Benjamin Radford holds a 3-foot marker at 150 feet. Using this image, the "monster" in the Mansi photo can be measured. (Photo by Joe Nickell)

aren't actually present is well documented (see, e.g., Williams, Loftus, and Deffenbacher 1992). If you look at the downward curve of the nose and head, it's easy to see how water draining off the lowest point could be interpreted as coming from a hidden mouth.

Size. The object's actions seem to be distinctly nonliving, but if it really is the monstrous size suggested, a lake creature remains a possibility. Many analyses had been conducted to determine the object's size (Mansi said fifteen to twenty feet; LeBlond suggested sixteen to fifty-six). If valid, these estimates would suggest a lake monster, but the measurements were indirect and fraught with error. The lack of reference objects and known distances makes the task formidable. However, the analysis can be approached from a different angle: Although we don't know the absolute size of—or distance to—the object, we do know what Sandra Mansi reported as the size and distance. With those variables fixed, it is a fairly straightforward process to determine whether the object is the size she (and others) claim.

To help judge the validity of the Mansi photo, we carried out some experiments during our expedition to Lake Champlain. Following an unfruitful attempt to locate the original site, we chose a spot on the lake in the same general area. Joe Nickell stood approximately 8 feet above the waterline; this height is similar to that reported by Sandra Mansi (kneeling down atop a 6-foot ledge). I entered the lake holding a 3-foot black-and-white scale marker, measured off in 1-foot lengths. Photographs (using the same type of camera Mansi used in 1977—a Kodak Instamatic, fixed-focus 110) were taken at 50-foot intervals, ending up 150 feet from shore (figure 2.10). The distances were measured directly, calibrated using a synthetic string to avoid any stretching in the water. Joe also took duplicate photos with his own 35 mm camera (those reproduced here). For comparison, we verified that both cameras were of the same focal length.

With the camera at the height Mansi claimed (about 8 to 9 feet) and the marker in the water at the distance she claimed (150 feet), this should allow us to measure the size of an object in that scale. Any object of a claimed size at a certain distance (at a given focal length) will take up a measurable space in the print. We measured the size of the 1-foot

Figure 2.11 A six-foot "Champ" neck rises out of Lake Champlain. (Photo by Joe Nickell)

scale at 150 feet on our photograph, marked that, and transferred the measurement to the Mansi image scaled to the same size. For greatest accuracy, I carefully measured the Champ object in comparison to the original photo in its entirety, not the magnified and cropped commercial version that appears in books and magazines (and is reproduced here).

Unfortunately for those claiming that the Mansi object is huge, the numbers don't add up. All the previous estimates of the object's size were dramatically overstated. The "neck" sticking out of the water is nowhere near the previous estimates of 6 to 8 feet or more. Instead, the object is just over 3 feet out of the water, and both segments together are about 7 feet across. (A less accurate comparison using the least-cropped publicly available version of the photo, in the April 1998 issue of *Discover* magazine, produces a neck height of about 4 feet.) To double-check our results, we also worked backward, using a photograph of a mock Champ neck and head held 6 feet above the water at 150 feet (figure 2.11). If Mansi's estimates are correct, the neck height in the two

photos should look very similar. Using that scale for measurement, we verified that our estimate was indeed accurate.

Note that our analysis is based on Sandra Mansi's own estimates and testimony. Because the object in the photo is inconsistent with the claimed height, those who wish to maintain that the object is 6 feet or taller (and 15 feet or longer) will have to decide which part of Mansi's story is false (or inaccurate). There is no way to be sure exactly how large the object is, but estimates of the distance and the size can't both be correct; either one—or both—must be wrong. Since the publication of our results, I have been contacted by two other researchers who independently arrived at similar estimates regarding the object's size.

At least one researcher, J. Richard Greenwell (1992), concluded that Mansi's 150-foot distance estimate is correct: "we concluded that that object, whatever it is, was there in the lake at that estimated distance." The most likely explanation is that the Mansis simply thought the object was bigger than it was. This effect is well known in eyewitness reports; Zarzynski (1988a, 109) himself warns about it: "many estimates

Figure 2.12 The heavily wooded shores of Lake Champlain offer an explanation for the many logs and tree stumps in and around the lake. (Photo by Benjamin Radford)

of length tend to be overstated." Yasushi Kojo (1991), another Champ researcher, also states that "the sizes of the animals are frequently overestimated in sighting reports."

This revelation sheds new light on the object in the Mansi photograph. With the size approximately half that of all previous estimates, the range of possible candidates becomes far larger—including a large bird, a known animal, or a floating tree stump.

My Conclusions. It seems clear that the object had none of the characteristics of a living animal. The object that Mansi saw and photographed, I believe, was almost certainly a log or tree stump that happened to surface at an angle that made it difficult to identify. Sandra Mansi's own description of the object's texture supports this conclusion: "The texture looks like bark, like crevice-y." How could someone mistake a tree for a living creature? For anyone knowledgeable about eyewitness testimony, it's not difficult to imagine.

The case of another unknown animal sighting is instructive. In March 1986, Anthony Wooldridge, an experienced hiker in the Hima-

Figure 2.13 Many pieces of driftwood resemble a lake monster's head and neck. (Photo by Benjamin Radford)

layas, saw what he thought was a Yeti (a Bigfoot-like creature) standing in the snow near a ridge about five hundred feet away. He described the figure as having a head that was "large and squarish," and the body "seemed to be covered with dark hair." It didn't move or make noise, but Wooldridge saw odd tracks in the snow that seemed to lead toward the figure. He took two photos of the creature, which were later analyzed and shown to be genuine and undoctored. Many in the Bigfoot community seized on the Wooldridge photos as clear evidence of a Yeti, including John Napier, an anatomist and anthropologist who had served as the Smithsonian Institution's director of primate biology. The next year, researchers returned to the spot and found that Wooldridge had simply seen a dark rock outcropping against the snow that looked vertical from his position (Wooldridge 1987).

Several researchers have suggested visual explanations of the object in the Mansi photo. In one case (seen in a 2003 Discovery Channel documentary), a researcher compared the image's silhouette to various animals and objects, such as a jumping fish, a bird, or a tree stump. I found his (failed) attempt at duplicating a possible tree stump rather unimpressive, so I created a scale model of a tree stump that, from certain angles, might resemble the object Mansi saw and photographed (see the results in appendix 3). Though the shape doesn't exactly match the Mansi image, it clearly demonstrates one possibility.

Driftwood and logs are common in and around Lake Champlain. Much of the shoreline is heavily wooded, and washed-up driftwood can be found littered along the shore (figures 2.12 and 2.13). Many of these logs are roughly the size and shape of long, sinewy creatures; it doesn't take much imagination to see how some of the thousands of logs, trees, and stumps along the lake's nearly six hundred miles of shoreline could be mistaken for a living creature if roiled up by waves and currents.

There is another compelling reason to suspect that many of the sightings (including Mansi's) are in fact logs: Lake Champlain has a large and powerful seiche. While the surface of the lake remains calm, an enormous underwater wave—as large as three hundred feet high—can bounce back and forth between the shores. Seiches can occur in just about any body of water, but as writer Dick Teresi (1998) points out,

"the ideal lake for really big seiches would be one like Champlain . . . long, narrow, and deep, and routinely subjected to a severe winter so that the lower level of water can stay cold while the upper layer warms up in the spring." The seiche in Lake Champlain can easily bring debris, logs, and vegetation from the lake's bottom up to the surface.

How could a sunken log act like a living creature, suddenly surfacing for a few minutes and then sinking again? Jerry Monk, a British hydrographic surveyor, provides an expert's opinion on the matter:

> When a piece of wood is first immersed in water it has many gas-filled lacunae in its structure. Over time, this gas is absorbed in the water and diffuses out, increasing the density of the wood, eventually to the point where it becomes denser than water and sinks. If there is a thermocline (a region where the temperature falls rapidly with increasing depth) it is perfectly possible for the log to float in mid-water on the denser layer. Otherwise it will sink to the mud on the bottom. This environment tends to be anoxic (devoid of oxygen) and anaerobic bacteria get to work on it, producing methane as a by-product. Once the methane saturates the water, it will be produced as gas whose volume will depend inversely on the pressure. During the winter the waters of the lake cool down and, as water has its greatest density at 39 degrees F, water of that temperature will collect on the bottom while the surface may well be colder or frozen. In the spring the warming air will warm up the surface layer that was already less dense than the bottom water, and so there is no overturning, a well-defined thermocline developing instead. Also, as the surface waters warm up, bacterial activity increases and more methane is produced. Eventually a rotting log may get pockets of methane large enough to make it buoyant again and it will float slowly off the bottom and rise with increasing speed as the pressure decreases and the methane bubbles enlarge. . . . Once the log has reached the surface, it will typically roll about a bit as the exposed parts reach a

> balance with the centre of buoyancy, and the methane trapped within will leak out. This will lead to a gradual loss of buoyancy again and the log will gradually submerge, exactly as described by Mrs. Mansi. (Monk 2004)

Part of the reason the Mansi photo is so striking is that we're used to seeing professional, unambiguous photography. The photographs the average person sees on a daily basis are the crisp, clear, retouched images in advertisements, on television, and in magazines. But photographs are simply two-dimensional representations of an object. We don't do nearly as well when confronted with ambiguous photos; tricks in perspective easily fool the eye.

I believe that Sandra Mansi is an honest person who may have done what we all do from time to time: she misunderstood something she saw. The only thing that makes her case special is that she managed to get a photograph of it. If the form she saw and photographed in the water had obviously been a floating tree stump or log, it would have been ignored or filed away. Instead, the visual ambiguities that tantalized Sandra Mansi in 1977 remain in the photo today, ensuring its place in lake monster history.

Some have suggested that the object can't be a log because that possibility was ruled out by "expert analysis." This misunderstanding may be the result of journalistic errors. For example, a United Press International report asserted that "experts at the University of Arizona say an analysis indicated the picture is real and shows the image of a live animal" (Lake's Champ 1981). According to another ill-informed writer, "The photograph was examined at the University of Chicago and the University of Arizona, and investigators at both schools said it showed some sort of animal life. While it was confirmed the creature in the Mansi photo was alive, its identity was not confirmed" (Sandra Mansi photograph 2002). Yet these findings don't appear in Frieden's report or anywhere else. What Frieden wrote was that the object didn't "appear to be a montage or superposition" and that it was almost certainly a real object in the lake; there was no statement to the effect that the object had been confirmed to be alive.

It's also fair to ask why the object looks like Champ in the first place. After all, this is supposedly the best image of the creature, and many eyewitness descriptions of Champ don't resemble the object in the Mansi photo at all. I showed a copy of the Mansi photo to Norm St. Pierre, our Lake Champlain guide, and asked him what it looked like. "It looks like Champ," he replied. I realized that it does indeed, and that assumption feeds a sort of loop whereby uncorroborated and uncertain evidence is used to support other suppositions: we don't know what Champ looks like, but if we see an unusual photo of something in the water that we can't explain, we're happy to call it Champ. Thus unverified reports, mistakes, and misidentifications all get thrown into the mix, with little justification for inclusion or exclusion. When I pressed St. Pierre for his best non-Champ guess, he replied, "Maybe a drifting tree" (St. Pierre 2002). He estimated that the object was about four feet out of the water, closely matching the estimate we eventually calculated.

SONAR READINGS

Sonar searches of Lake Champlain have, on rare occasions, picked up readings of seemingly strange or large objects at depth, but none have been verified as Champ signatures. These readings often occur after weeks or months of surveying, and given that much time and opportunity, the odds are good that some sort of unusual reading will occur just by chance.

One problem with this sort of evidence is that sonar readings are imprecise and ambiguous by nature. *Fortean Times* writer Mike Dash (1997), reviewing the use of sonar in the search for lake monsters, found that "such evidence will always be ambiguous because (a) it is difficult to be sure any given contact is not a false echo produced by sound waves bouncing off lake walls underwater; and (b) such contacts are not absolute indicators of size, but merely indicate variations in density: a small fish with a large swim-bladder can produce strong echoes." As one sonar technician told me during our search of Lake Okanagan (detailed in chapter 7), "sonar is half image and half interpretation." Said another

during our investigation of Lake Simcoe in Canada, "The sooner you understand that a fish finder will lie to you, the sooner you understand a fish finder" (Clayton 2005). Because of this inherent ambiguity, most researchers emphasize other types of evidence.

In June 2003, a group of researchers from a company called Fauna Communications Research claimed that they had detected a series of strangely high-pitched ticking and chirping noises, akin to those made by a beluga whale or a dolphin, in Lake Champlain. The team, led by Elizabeth von Muggenthaler, was at the lake with a Discovery Channel documentary crew. (In fact, Joe and I reproduced some of the lake experiments described here for the same crew; the resulting show, *America's Loch Ness Monster,* aired October 26, 2003.) The documentary group followed von Muggenthaler on several unsuccessful expeditions, violating scientific protocol at least once for the film crew's benefit.

The team's announcement led to media speculation that solid evidence had finally been found for Champ; a local newspaper headlined, "Champ Might Be for Real after All." Although von Muggenthaler declined to guess the size or shape of the creature—or confirm that it was indeed Champ—she said, "What we got was a biological creature creating biosonar at a level that only a few underwater species can do." The sounds were presumed to be the result of a type of echolocation, the means by which some animals seek food. The biosonar, she said, was ten times louder than that of any known species of fish in the lake. And although mechanical devices and fish finders can simulate the readings, von Muggenthaler stated that the irregular sequence they detected ruled out such an explanation. "Man-made sonar or fish-finders send out a signal that is very regular, and entirely different than biologically produced sonar" (von Muggenthaler 2004b).

The fact that von Muggenthaler suggested that the sound resembled a beluga whale is interesting. Though no beluga whales have been reported in Lake Champlain, they do exist in the St. Lawrence Seaway, which is linked to the lake. I contacted von Muggenthaler to learn more about her findings and to ascertain in what ways the sounds are different from those made by whales and dolphins. She explained:

> When analyzing animal vocalizations, one looks at basically three components, frequency, amplitude, and time. . . . The differences between the [Lake Champlain] signal and [signals of] dolphin, killer whale, and beluga whale have to do with frequency, some higher, some lower; amplitude (killer whales are louder, beluga and dolphin are less loud); and, with regard to time, the Lake Champlain signal fell somewhere in the middle of these three. . . . I have no idea what is in Lake Champlain. What I do know is that to date, animals that we know of that use echolocation underwater are carnivores, have impressive communication centers in the brain, and inhabit marine environs, not freshwater. (von Muggenthaler 2004a)

It's unclear what to make of this evidence. As of this writing, the recordings haven't been fully analyzed, and the findings haven't appeared in any peer-reviewed scientific journal. Obviously, anomalous readings by themselves don't indicate the presence of a monster. At several points in their search, strange biosonar readings yielded no creature sightings at all. The Discovery Channel documentary shows von Muggenthaler's crew detecting an unusual high-frequency pitch and immediately dispatching two divers to investigate the source of the sound. If unusual readings did in fact indicate the presence of a monstrous creature, the divers presumably would have seen it. Yet despite an hour's search, the divers "saw nothing strange, just the usual fish."

CONCLUSION

I don't flatly discount the idea of large, unknown creatures in Lake Champlain; it's possible that—despite a nearly complete lack of good evidence—such creatures exist. However, given what we know about the Mansi photograph (the best evidence to date) and its circumstances, of all the possible things the object could be—animal, tree, or something else—the least likely explanation is an unknown creature that has managed to elude detection for decades. It's probably a familiar feature on the lake seen and photographed from an unfamiliar angle.

It's interesting to note that in the nearly three decades since the Mansi photo was taken, that image remains the best. Lake Champlain has had a dramatic increase in the traffic on and population around the lake; cameras are cheaper, better, and more widely available than ever before. If a group of giant unknown creatures is in fact living in the lake, it seems odd that another one hasn't been better photographed since then. There is also the fact that many people who have spent large amounts of time searching in and on the lake have never seen Champ. For every old-timer who swears he's seen the monster, there's another who has spent just as much time on the lake and never seen a thing.

At Lake Champlain (as at Loch Ness and Lake Okanagan), there is an economic incentive to keep the lake monster legend alive. There is an annual Champ Day event and parade at Port Henry, New York. In most of the communities around the lake, Champ is regarded as a regional mascot, a friendly lake creature all their own. Champ images can be found on the sides of buildings, on signs, and elsewhere.

The legend of Champ has also been kept alive by newspapers eager to exploit the story, court readers, and drum up tourism. One such paper was the *Burlington Free Press*: "Whenever the Champ seemed destined to be regulated [*sic*] to the realm of mythology, it was E. F. Crane, editorial writer for the *Burlington Free Press,* who would come to the mobster's [*sic*] rescue. Wrote Mr. Crane, 'This effort to debunk, eliminate and permanently bury the Lake Champlain Monster will not work. . . . If Loch Ness can have its Monster and capitalize on it year after year, is there any reason why Lake Champlain can't have one too?'" (Furlow 1977, 61).

Robert Bartholomew, a sociologist who has lived on the shore of Lake Champlain for years, believes that the continued interest in Champ serves several symbolic functions for the New York and Vermont residents living near the lake:

> Champ's very existence and persistence over centuries in the wake of demanding evidence from scientists who require conclusive proof, serves as an anti-scientific symbol. . . . Champ is in some ways a reflection of the region's collective imagination.

> Given the widespread belief in Champ across the region, in the absence of unambiguous proof of its reality, the ongoing search may tell us more about the hunters than the hunted. In this regard, the Champ mystery is not likely to be solved by scouring Lake Champlain in hopes of seeing a prehistoric aquatic creature, but by turning away from the lake and examining the human mind, and what deep-seated psychological needs are being fulfilled. (Bartholomew 2003).

Bartholomew believes that Champ is, among other things, an environmental symbol highlighting the delicate balance that exists in nature and the need to protect and preserve endangered species. This view is supported by the unanimous efforts of Champ proponents to protect the lake environment (Joe Zarzynski pushed through a government resolution protecting the creature; Sandra Mansi often speaks of the importance of protecting the lake's ecology, as does Dennis Jay Hall).

Piece by piece, the Champ mythos comes apart. The original sighting by Samuel de Champlain has been shown to be a fiction, the result of journalistic error. The contention of a long tradition of Champ sightings has been disproved. No bodies or bones have been found. The object in the Mansi photograph, the best photo of any lake monster anywhere, is revealed though field research to be less than half the size originally claimed, and an analysis of the account and the photo show that the object didn't act or look like an animal. All we are left with are occasional sightings of unknown—but not unexplainable—objects in the lake and the firm belief that Champ lives in its depths. Some of those looking for Champ will continue to find it; all the evidence they need can be found in and around the lake's cold waters.

REFERENCES

Bartholomew, Robert. 2003. Personal communication, February 6.

Binns, Ronald. 1984. *The Loch Ness mystery solved.* Buffalo, N.Y.: Prometheus Books.

Blackman, W. Haden. 1998. *The field guide to North American monsters.* New York: Random House, 54–56.

Champ unmasked. N.d. *Plattsburgh Press-Republican* newspaper clipping, ca. 1984, with photo of driftwood resembling prototypical Champ monster.

Clark, Jerome, 1983. America's water monsters: The new evidence. In *Mysteries and monsters of the sea: True stories from the files of* Fate *magazine.* 1988. Edited by Frank Spacth. New York: Gramercy Books, 55–64.

———. 1993. *Unexplained! 347 strange sightings, incredible occurrences, and puzzling physical phenomena.* Detroit, Mich.: Gale Research, 61–67.

Clark, Jerome, and Nancy Pear. 1995. *Strange and unexplained happenings: When nature breaks the rules of science.* Detroit, Mich.: Gale Research.

Clayton, Jerry. 2005. Interview by Benjamin Radford and Joe Nickell, August 27.

Coleman, Loren. 1983. *Mysterious America.* Winchester, Mass.: Faber and Faber, 85–92.

Dash, Mike. 1997. Lake monsters. *Fortean Times* 102 (September): 28.

Forrest, Thomas H. 2002. Interview by Joe Nickell, August 3.

Frieden, B. Roy. 1981. Interim report: Lake Champlain "monster" photograph. Appendix 2 in Zarzynski, Joseph. 1984. *Champ: Beyond the legend.* Port Henry, N.Y.: Bannister Publications.

Furlow, Herbert M. 1977. Has anybody seen the Champ of Lake Champlain? In *Secrets of Loch Ness,* No. 1. New York: Histrionic Publishing Co.

Godin, Alfred J. 1983. *Wild mammals of New England.* Chester, Conn.: Globe Pequot Press, 173.

Gould, Rupert T. 1976. *The Loch Ness monster and others.* Secaucus, N.J.: Citadel Press.

Grant, John. 1992. *Monster mysteries.* Secaucus, N.J.: Chartwell Books.

Green, Susan. 1999. Lake creature eludes centuries of searchers. *Burlington Free Press,* June 25. www.s-t.com/daily/07–99/072599/c03wn084.htm.

Greenwell, J. Richard. 1992. Quoted on *Unsolved Mysteries,* National Broadcasting Company, September 23.

Hall, Dennis Jay. 2000. *Champ quest: The ultimate search.* Jericho, Vt.: Essence of Vermont.

———. 2003. Personal communication, February 1.

Hollowell, Laura. 2002. Interview by Joe Nickell, August 24.

"John," *Valcour* ferry deckhand. 2002. Interview by Joe Nickell and Benjamin Radford, August 26.

Kirk, John. 1998. *In the domain of the lake monsters.* Toronto: Key Porter Books.

Kojo, Yasushi. 1991. Some ecological notes on reported large unknown animals in Lake Champlain. *Cryptozoology* 10:42–45.

Lake Champlain hydrographic contour map. N.d. North, central, and south sections. N.p.: Fishing Hot Spots.

Lake's Champ reported seen. 1981. *Plattsburgh Press-Republican,* ca. April 18.

LeBlond, Paul H. 1982. An estimate of the dimensions of the Lake Champlain monster from the length of adjacent wind waves in the Mansi photograph. *Cryptozoology* 1:54–61.

LeBlond, Paul H., and Michael J. Collins. 1987. The Wilson Nessie photo: A size

determination based on physical principles. *Cryptozoology* 6:55–64.
Mansi, Sandra. 2002. Interview by Benjamin Radford, August 24.
Meurger, Michel, and Claude Gagnon. 1988. *Lake monster traditions: A cross-cultural analysis.* London: Fortean Tomes.
Monk, Jerry. 2004. Letter to the editor. *Fortean Times* 185 (July): 76.
Myth or monster. 1972. *Time* 20:66.
Nickell, Joe. 1994. *Camera clues: A handbook for photographic investigation.* Lexington: University Press of Kentucky, 169–72.
———. 1996. Nessie hoax redux. *Skeptical Briefs* 6, no. 1 (March): 1–2.
———. 2001. *Real-life X-files: Investigating the paranormal.* Lexington: University Press of Kentucky.
Owen, Elizabeth. 1982. In search of a monster. *Life* (August): 32–36.
Porter, Marjorie L. 1970. The Champlain monster. *Vermont Life* 24, no. 4 (summer): 47–50.
Sandra Mansi photograph. 2002. True authority: The site of scientific authority. www.trueauthority.com/cryptozoology/sandra.htm.
Smith, Richard D. 1984. Testing an underwater video system at Lake Champlain. *Cryptozoology* 3:89–93.
St. Pierre, Norm. 2002. Interview by Benjamin Radford, August 25.
Teresi, Dick. 1998. Monster of the tub. *Discover* 19, no. 4 (April): 87–92.
Vachon, Brian. 1977. In search of the Champlain monster. *Yankee Magazine* (November): 136–39, 211–16.
von Muggenthaler, E. 2004a. E-mail to Benjamin Radford, November 16.
———. 2004b. Lake Champlain research. www.animalvoice.com/lakechamplain.htm.
Whitaker, John O. Jr. 1996. *National Audubon Society field guide to North American mammals.* New York: Alfred A. Knopf.
Williams, H., E. Loftus, and K. Deffenbacher. 1992. Eyewitness evidence and testimony. In *Handbook of psychology and law.* Edited by D. Kagehiro and W. Laufer. New York: Springer-Verlag.
Wooldridge, A. B. 1987. The Yeti: A rock after all? *Cryptozoology* 6:135.
Zarzynski, Joseph. 1982. LCPI work at Lake Champlain, 1982. *Cryptozoology* 1:73–77.
———. 1983. LCPI work at Lake Champlain, 1983. *Cryptozoology* 2:126–31.
———. 1984a. *Champ: Beyond the legend.* Port Henry, N.Y.: Bannister Publications.
———. 1984b. LCPI work at Lake Champlain, 1984. *Cryptozoology* 3:80–83.
———. 1985. LCPI work at Lake Champlain, 1985. *Cryptozoology* 4:69–73.
———. 1986. LCPI work at Lake Champlain, 1986. *Cryptozoology* 5:77–80.
———. 1987. LCPI work at Lake Champlain, 1987. *Cryptozoology* 6:71–77.
———. 1988a. *Champ: Beyond the legend.* 2nd ed. Port Henry, N.Y.: Bannister Publications.
———. 1988b. LCPI work at Lake Champlain, 1988. *Cryptozoology* 7:70–77.
———. 1989. LCPI work at Lake Champlain, 1989. *Cryptozoology* 8:67–72.

———. 1992. LCPI work at Lake Champlain, 1991–1992. *Cryptozoology* 11:102–8.

Zug, George. 1981. Does Champ exist? Seminar in Shelburne, Vt., August 29, cited in Zarzynski 1984a, 80.

3

Lake Memphremagog

Located in north-central Vermont and extending into Quebec, Lake Memphremagog is the second largest lake in the state (figure 3.1). According to Malloy (2003b), the name is from the Western Abenaki *Mamlabegwok,* which means "at the Big Lake Water"; another source (Lake Memphremagog n.d.) gives the meaning as "Beautiful Waters." Like Vermont's largest lake, Lake Champlain, Lake Memphremagog hosts its own aquatic monster, "Memphre" (Lake Memphremagog n.d.; Malloy 2003b). In fact, there are purportedly five Vermont lake monsters—or "Vermonsters"—all with cute nicknames. Besides "Champ" and "Memphre," there are "Seymour" or "Semoe" (Seymour Lake), "Willy" (Willoughby Lake), and "Ms. Crystal" (Crystal Lake). Obviously, every large lake should have one.

SIGHTINGS

Reports of the creature date to 1816 (Citro 1994; Histoire n.d.), and some claim that, long before, "North American Indians in the region warned early settlers not to bathe in Lake Memphremagog because of the mysterious monster" (Lake monster 2003). The first Lake Memphremagog monster hunter—who today might call himself a cryptozoologist—was Uriah Jewett (1795–1868). Known as "Uncle Riah," he was a local fisherman and raconteur who believed that an Atlantic "sea serpent" had entered the lake by means of a subterranean channel and

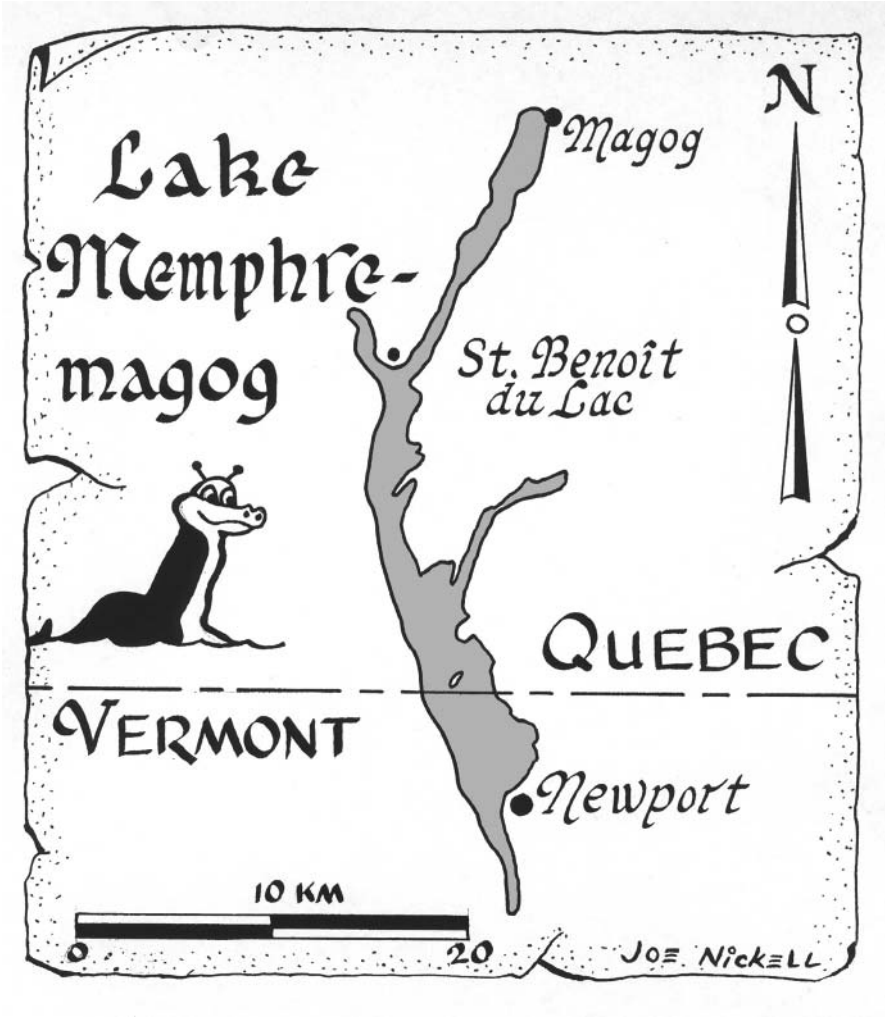


Figure 3.1 Lake Memphremagog on the Quebec-Vermont border. (Map by Joe Nickell)

become trapped, being too stupid to retrace its route (Citro 1994). Jewett attempted to catch the serpent—which the townspeople dubbed "Uriah's Alligator"—baiting traps with lambs' heads. His attempts failed, but in the 1850s he often regaled passengers on the lake steamer

The Mountain Maid by telling them that the bait had always been gone by morning (Citro 1994; Malloy 2003b, 2004).

A typical nineteenth-century sighting was related in the August 3, 1850, *Caledonian,* published at St. Johnsbury: "About two weeks ago [the serpent] was seen distinctly by Uncle David Beebe while fishing off Magoon Point. . . . A sudden splash attracted his attention, and turning, he was astonished to behold the head and six feet of body of a huge monster, perfectly erect and graceful, apparently motionless. He was soon relieved, however, by the sudden and almost silent disappearance below the surface." The article concluded, "That a critter of the snake species does there exist, seems hardly to admit a doubt" (quoted in Citro 1994).

Swimming deer, beavers, or especially otters may be responsible for a 1939 sighting (reported many years later) by a man who saw "something swimming" off the eastern shore of Newport Bay. As mentioned in chapter 2, otters swimming in a line can create the appearance of a giant undulating serpent. Perhaps they are the explanation for an incident in the 1940s in which two men encountered a huge snake, described as a foot in diameter and 150 feet long. A 1976 sighting by a man fishing on the lake is also highly suggestive of an otter: the man spied "a seal with a long neck. . . . It was black and well above the water" (Citro 1994).

As at Lake Champlain, there has been a tendency, over time, for descriptions of the purported monster to evolve, conforming to the concept of the day. The early characterization of "sea serpent" largely gave way to "snake," and more recently, the creature has been likened to a prehistoric aquatic animal called a plesiosaur (Malloy 2004)—a popular notion seemingly influenced by the 1934 hoaxed photo of "Nessie," the Loch Ness monster (see chapter 1).

WHAT'S IN A NAME?

Only recently has Memphre achieved widespread fame, benefiting from the attention given to Champ. Indeed, on our first trip to the area, Ben Radford dubbed the reputed monster "Champ Lite." The

very name of the creature has sparked controversy. Newport resident Barbara Malloy, who heads the International Dracontology Society of Lake Memphremagog (*dracontology* derives from the Latin and Greek words for "dragon"), claims exclusive rights to the appellation *Memphre.* She has threatened to sue reporters and historians who write about the purported creature or use its name without obtaining permission from her. Indeed, her threat to sue the local chamber of commerce delayed its merger with another regional chamber. The problem stems from Malloy's one-time collaboration with her Canadian counterpart, diver Jacques Boisvert of Magog, Quebec. They had a falling out during the 1990s, and Malloy objected to Newport officials placing Memphre literature from the rival Quebec society in their information booth (Perron 2003; Smith 2003a, 2003b; Travers 2003).

Boisvert also claims to have given the legendary creature its name (Smith 2003c). Apparently, however, it actually derives from a 1985 song, "Gentle Memphrie," by Helen Brown Burton. Malloy insists that in June 1986 Boisvert asked her permission to change the spelling to Memphré (a short form of the French *Lac Memphrémagog*), and that she agreed. She was disappointed and hurt when Boisvert failed to credit her with coining the name (Burton 1988).

REPEAT EYEWITNESS

In contrast to Boisvert—who has never encountered the creature but claims to have an open mind about the possibility of its existence—Malloy has had several sightings. The first was in 1983 and was shared by her two daughters. In 1989 she took two photographs of what she believes was Memphre (the better photo is reproduced as figure 3.2, with an enlargement in figure 3.3). Although they depict a dark object apparently leaving a wake, skeptics insist that there are other possibilities besides a lake monster. According to local reporter Robin Smith (2003c), "One recent photograph turned out to be a moose swimming across the lake."

Malloy's 1989 sighting may have a similarly prosaic explanation. When she graciously hosted Ben and me at her home, Malloy (2003a)

Figure 3.2 Photograph taken by Barbara Malloy of Newport, Vermont, showing a "small Memphre trapped between boat and shoreline." (Photo courtesy of Barbara Malloy)

Figure 3.3 Detail of figure 3.2 enlarged. Is this an unidentified lake monster or—as some evidence indicates—a beaver? (Photo courtesy of Barbara Malloy)

explained that on that occasion she had seen two of the creatures—one approaching from the left, and one from the right. When they were close to each other, they submerged. Malloy stated that the fisherman whose boat she was using told her that he had seen a beaver in the vicinity earlier. And although she reported hearing a slapping sound (such as when you slap the water with your hand, she indicated), she seemed not to make the connection: beavers are well known to produce such sounds with their tails to signal danger (*New Encyclopaedia Britannica* 1978).

Malloy has had other sightings—seven in all. She has collected more than sixty sighting reports, whereas Boisvert claims "well over 200" (Wickstrom n.d.). Nevertheless, she concludes, "Memphre is such a mysterious thing—so much mystery to it." And even she finds it curious that the monster shows itself to some people but not to others (Malloy 2003a).

CONCLUSION

I was able to spend some time looking for Memphre. When Ben and I visited Newport in June 2003, we explored along the waterfront. Subsequently, we drove to Magog, Quebec, at the lake's northern tip. There, we dined at La Legende Restaurant (its sign depicts Memphre, and the placemats list sightings). We then continued to a scenic overlook with a marker reading "Belvédère Memphré" (Memphre vista) and advising, "Site d'observation de créatures lacustres non-identifiées" (observation site for unidentified lake creatures). Unfortunately, no creature of any kind put in an appearance. On August 28, I returned to Magog to be interviewed for a Canadian television documentary on the legendary monster. The Montreal crew lent me their rented lakeside cottage (along with some leftovers and beer). Until dark, and again after daybreak the next morning, I maintained a vigil for the fabled lake monster. Alas, once again, it was a no-show. Skeptics often say, "Seeing is believing." In the case of lake monsters, it may be that believing actually helps with the seeing.

REFERENCES

Burton, Helen Brown. 1988. Not always fair [letter to editor]. *Stanstead (Quebec) Journal,* July 6.

Citro, Joseph A. 1994. *Green Mountain ghosts, ghouls & unsolved mysteries.* New York: Houghton Mifflin.

Histoire . . . d'une bonne bouffe! N.d. Placemat of La Legende Restaurant, Magog, Quebec (copy obtained June 5, 2003).

Lake Memphremagog: Beautiful waters. N.d. Newport, Vt., tourist leaflet circulated by local chamber of commerce.

"Lake monster" triggers cross-border fight. 2003. CBC News Online, May 18. www.cbc.ca/stories/2003/05/18/memphre030518.

Malloy, Barbara. 2003a. Interview by Joe Nickell and Benjamin Radford, June 5.

———. 2003b. *Memphre encounters: Celebrating twenty years, 1983–2003.* Newport, Vt.: Privately printed.

———. 2004. Discover Memphre. www.memphreusa.com.

New Encyclopaedia Britannica. 1978. Micropaedia, s.v. "Beaver," 1:915.

Nickell, Joe. 1996. Nessie hoax redux. *Skeptical Briefs* 6, no. 1 (March): 1–2.

———. 2003. Legend of the Lake Champlain monster. *Skeptical Inquirer* 27, no. 4 (July–August): 18–23.

Perron, Darren. 2003. Sea monster slows merger. Channel 3 News, September 24. www.wcax.com/global/story.

Smith, Robin. 2003a. Hands off my Memphre, says woman/campaigns to own sea monster. *Caledonian Record Online Edition,* May 17. www.caledonianrecord.com/pages/local.

———. 2003b. Memphre issue holds up merger. *Caledonian Record Online Edition,* July 19. www.caledonianrecord.com/pages/printer.

———. 2003c. Woman recounts sighting of Memphremagog monster. *Caledonian Record Online Edition,* May 10. www.caledonianrecord.com/pages/printer.

Travers, Eileen. 2003. Merger dilemma: Who gets custody of lake monster? Canada.com News, August 23. www.canada.com/components/printstory.

Wickstrom, Lois. N.d. The man who named Memphré. Nessie's Grotto. www.simegen.com/writers/nessie/boisvert.htm (accessed February 24, 2004).

This page intentionally left blank

4

Silver Lake

On the night of July 13, 1855, in Wyoming County, New York, two boys and five men were fishing from a boat on Silver Lake near the village of Perry. After several minutes of watching a floating log, one man exclaimed, "Boys, that thing is moving!" Indeed, according to the *Wyoming Times,* after bobbing in and out of sight, suddenly, "the SERPENT, for now there was no mistaking its character, darted from the water about four feet from the stern of the boat, close by the rudder-paddle, the head and forward part of the monster rising above the surface of the water. . . . All in the boat had a fair view of the creature, and concur in representing it as a most horrid and repulsive looking monster" (Silver Lake serpent 1855).

Soon, others were reporting sightings, and excitement spread far and wide. As reported in an 1880 pamphlet, "People came on foot, by carriage, on horseback, and in fact, by any means of locomotion in their power, to see if even a glimpse of the monster could be obtained, and the hotels found they had 'struck a bonanza.'" Several expeditions were launched—ranging from a whaler with a harpoon to a vigilance society of men armed with guns to a company with $1,000 worth of capital stock and bent on capturing the creature (*Silver Lake serpent* 1880, 3–21).

This was all to no avail, and the excitement eventually died down. Then, according to a modern account: "Several years later [1857] a fire broke out in the Walker Hotel. Firemen rushed to the scene to put out the blaze. When they worked their way into the attic they came upon a strange sight. In the midst of the flames they saw a great green

serpent made of canvas and coiled wire" (*Legend* [1984], 11). States another source: "The truth was then revealed by Mr. Walker himself," who "built that monster serpent with his friends to pick up the business at the Walker House Hotel" (quoted in *Legend* [1984], 1).

Mr. Walker was Artemus B. Walker (1813–1889), and the earliest version of the hoax attributed to him and his friends appeared in the December 12, 1860, *Wyoming County Mirror.* "Everyone remembers," stated the brief article, "that during the Silver Lake snake excitement, at Perry, the hotel there reaped a rich harvest of visitors. A correspondent of the *Buffalo Commercial* says that when about two years and a half ago, the hotel was partially burned, a certain man discovered the serpent in the hotel," constructed "of India rubber." According to the reporter, the man who uncovered the rubber fake "has just got mad at the landlord and divulged the secret." The newspaper story ended on a skeptical note: "We suppose this last game is just about as much of a 'sell' as the original snake."

The hoax was described in more detail in 1915, in a local history by Frank D. Roberts:

> The serpent was to be constructed of a body about 60 feet long, covered with a waterproof canvas supported on the inside by coiled wire. A trench was to be dug and gas pipe laid from the basement of a shanty situated on the west side of the lake, to the lake shore. A large pair of bellows such as were used in a blacksmith shop, secreted in the basement of the shanty connected to that end of the pipe, and a small light rubber hose from the lake end to the serpent. The body was to be painted a deep green color, with bright yellow spots added to give it a more hideous appearance. Eyes and mouth were to be colored a bright red. The plan of manipulating the serpent was simple. It was to be taken out and sunk in the lake, and then when everything was ready, the bellows were to be operated and air forced into the serpent, which naturally would cause it to rise to the surface. Weights were to be attached to different portions of the body to insure its

> sinking as the air was allowed to escape. Three ropes were to be attached to the forward portion of the body, one extending to the shore where the ice house now stands; one across the lake, and the other to the marsh at the north end; the serpent to be propelled in any direction by the aid of these ropes. (Roberts 1915, 200–201)

Roberts adds, "Many nights were spent" in the construction of the creature, after which it was transported to the lake and sunk at a depth of some twenty feet. Then came Friday evening, July 13, 1855—and you know the rest of the tale.

Today, the signs at the Perry city limits sport a sea monster, and the town hosts an annual Silver Lake Serpent Festival. The one I attended in 1998 featured hot-air balloons, one of which was an inflated sea serpent that flew me over the scenic lake and countryside (see figures 4.1 and 4.2).

Figure 4.1 Balloon's-eye view of Silver Lake in Wyoming County, New York, site of several 1855 lake monster sightings. (Photo by Joe Nickell)

Figure 4.2 Hot-air balloon at the 1998 Silver Lake Serpent Festival in Perry, New York. Joe Nickell is the one wearing the white shirt. (Photo from Joe Nickell's collection)

EXAMINING THE HOAX

The hoax story is a colorful yarn, but is it true? It has certainly been reported as factual, even by writers who are more inclined to promote the *existence* of mysterious monsters. For example, John Keel's *Strange Creatures from Time and Space* (1970, 260–61) claims that the Silver Lake case proves "that a sea serpent hoax is possible and was possible even in the year 1855." Keel also claims that "witnesses generally gave a very accurate description of what they had seen" (260). He is echoed by Roy P. Mackal, whose *Searching for Hidden Animals* (1980, 209) specifically states that the Silver Lake creature was "described as . . . shiny, dark green with yellow spots, and having flaming red eyes and a mouth and huge fins." Other sources follow suit, including the *History of Northwestern New York,* which states that watchers "beheld a long green body, covered with yellow spots . . . and a large mouth, the interior of which was bright red" (Douglass 1947, 562). In fact, not one of the original eyewitness reports mentions yellow spots or a red mouth.

Among the problems with the hoax story is that it exists in a suspicious number of variants. For example, whereas Roberts's previously cited account of the hoax's discovery refers to an actual wire and canvas monster being found by firemen in the hotel attic, other sources state that "in the debris left by the fire were found the remains of the Silver Lake Monster" (Mackal 1980, 209), specifically, "the frame of the serpent" (Silver Lake serpent revived n.d.) or maybe just "remnants of wire and green canvas" (Fielding 1998).

At least one source asserts, "The creators of this stupendous hoax soon afterward confessed" (Peace 1976), and monster hunter Mackal (1980, 209) names the "confessed" perpetrators as Walker and *Wyoming Times* editor Truman S. Gillett. However, one writer attributes the newspaper's alleged involvement to "rumor" (Kimiecik 1988, 10), and a longtime local researcher, Clark Rice, insists that Walker was only suspected and that "no one ever admitted to helping him" (Fielding 1998).

Due to its many variations, the story is appropriately described as a "legend," a "tale," or even "the leading bit of folklore of Perry and Silver

Lake" (*Perry* 1976, 145). States Rice: "It was a subject that was bantered around when you were growing up, and everyone had a different version" (Vogel 1995).

Invariably, books and articles on the subject cite Roberts's previously quoted account. Writing in 1915, sixty years after the alleged hoax, Roberts gives no specific source or documentation, instead relying on a fuzzy, passive-voice grammatical construction to say, "to the late A. B. Walker is *credited* the plan of creating the Silver Lake sea serpent" (emphasis added), having supposedly been assisted by "a few of his intimate and trustworthy friends"—who remain unnamed. He adds, "*It is said* that the serpent was made in the old Chapin tannery" (emphasis added), further indication that Roberts is reporting rumor (Roberts 1915, 200, 202).

The elaborateness of the monster's mechanism raises further suspicions. First is the alleged laying of a "gas pipe," yet gas lines did not come to Perry until 1909, nor piped water until 1896 (*Perry* 1976, 119, 124). The availability of the "small light rubber hose" that reportedly extended from shore to serpent seems equally doubtful in a mid-nineteenth-century village. The Pioneer Museum at Perry has on display a large old bellows attributed to the hoax (figure 4.3), but the display card states that it is "*believed* to have been used to inflate the Silver Lake sea serpent" (emphasis added).

Materials aside, the complexity of the contraption described by Roberts provokes skepticism as well. Although such a monster does not contravene the laws of physics (Pickett 1998), the propulsion method raises some serious questions. The ropes that were reportedly attached to the serpent and extended to three different lakeside sites would have greatly complicated the operation, not to mention multiplying the danger of detection. Indeed, the Silver Lake contrivance seems to have been a rather remarkable engineering feat—especially for a hotelier and some village friends. One suspects that they would have had to sew a lot of canvas and make many experiments before achieving a workable monster, yet Roberts (1915, 202) claims that theirs worked on the first attempt. In fact, over the years, attempts to replicate the elaborate monster have failed (Fielding 1998; Peace 1976).

Figure 4.3 Joe Nickell with bellows (probably a blacksmith's) allegedly used to inflate a fake rubber serpent as part of an elaborate hoax. (Photo by Joe Nickell)

The 1855 frenzy led to other tall tales that were largely played out in the newspapers, which treated the whole affair as great sport. For example, in September the *Chicago Times* reported that two visitors had seen the monstrous serpent harpooned and towed to shore. The newspaper jocosely reported that at nightfall the creature uprooted the tree to which it was tethered and returned to the lake. It was recaptured the next day, said the *Times,* whereupon it "awoke, threw its head 60 feet into the air; lurid eyes glared like balls of flame and its tongue, like flashes of forked lightning, 10–12 feet long, vibrated between its open jaws" (Douglass 1955, 119).

Insinuations of hoaxing probably elicited the following statement by *Wyoming Times* editor Gillett. On August 8, 1855, he wrote: "We assert, without fear of contradiction, that there is not a log floating on the water of Silver Lake—that nothing has been placed there to create the serpent story," and that the paper published what had been related by truthful people (Silver Lake serpent 1855).

In sum, the historical evidence diminishes as we work backward to the alleged hoax, whereas, conversely, details of the story increase with distance from the supposed event. Therefore, it appears that the story—rather than the serpent—became inflated. If Walker or others did perpetrate a hoax, it is unlikely that it involved an elaborate contraption such as that described by Roberts.

SIGHTINGS

Despite the claim that Walker created the serpent, newspaper accounts from the time make it clear that there was an earlier Indian tradition about a Silver Lake serpent and that such a monster had been "repeatedly seen during the past thirty years" (Silver Lake serpent 1855). Certainly, not all the 1855 sightings can be explained by the monster contraption Roberts described. According to his account, it was installed near the northern end of the lake, where both the inlet and the outlet are located. Yet on Thursday, August 16, farmer John Worden and others who were "on the west shore of the lake *between two and three miles above the outlet*" reportedly sighted "the monster" about a quarter mile distant (Silver Lake serpent 1855; emphasis added). Surely no one imagines that the fake monster could have been controlled from more than two miles away. Nor can the monster apparatus explain sightings of a distinct pair of creatures at the same time (*Silver Lake serpent* 1880, 19–20).

At this late date, we can only round up the usual lake monster suspects. As the perpetual saga at Scotland's Loch Ness demonstrates, "monsters" can be created by floating trees and driftwood, leaping fish, swimming otters and deer, wind slicks, and many other culprits—often seen under such illusion-fostering conditions as mirage effects and diminished visibility (Binns 1984). For example, some of the Silver Lake sightings, including the one that launched the 1855 frenzy, occurred at night, when visibility would have been relatively poor and imaginations heightened.

Eyewitnesses typically insisted that the object was a living creature, sometimes with its head above the water. One possible candidate is the otter, which "when swimming seems a very large creature" (Scott 1815).

As described in chapter 2, otters can simulate a monstrous serpent, especially if several are swimming together in a line. On one of my visits to Silver Lake, while walking along a nature trail I was startled by a creature swimming in a nearby stream; it quickly vanished, and I was puzzled as to its identity until I learned that otters had recently been reintroduced there.

I subsequently talked with New York State wildlife experts about the possibility of otters being mistaken for mid-nineteenth-century "lake serpents." Bruce Penrod, senior wildlife biologist with the Department of Environmental Conservation, stated that it was "very probable" that otters had been in the Silver Lake area in 1855. And if the sightings were not hoaxes, he said, he would clearly prefer otters—or even muskrats, beavers, or swimming deer—over sea monsters as plausible explanations for such sightings (Penrod 1998).

I thought of otters especially when I studied the two 1855 accounts of a *pair* of "serpents" estimated at twenty to forty feet long. The witnesses in each case might have seen two or more otters that, together with their wakes, gave the impression of being much longer creatures. All the witnesses were observing from considerable distances—in one case, through a spyglass (*Silver Lake serpent* 1880, 19–20); these distances could easily be overestimated, thus exaggerating the apparent size of the creature. Because otters are "great travelers," with nomadic tendencies (Kopp 1998), it is possible that a group of them came into Silver Lake in the summer of 1855 and later moved on, thus initiating and then ending that particular rash of sightings.

CONCLUSION

The least likely explanation for the Silver Lake reports is that some exotic creature inhabited its waters. Whatever people did see, the situation was hyped by the local newspaper and the antics of would-be monster hunters. People's expectations were thus heightened, which led to misperceptions. Even the overly credulous paranormalist Rupert T. Gould admitted that people who are expecting to see something can be misled by anything having a slight resemblance to it. Gould called this

tendency "expectant attention" (Binns 1984, 77–78) and it is the basis of many paranormal claims, apparently including sightings of the Silver Lake serpent—a case of the tale wagging the monster.

REFERENCES

Binns, Ronald. 1984. *The Loch Ness mystery solved.* Buffalo, N.Y.: Prometheus Books.

Douglass, Harry S. 1947. "Wyoming County." In *History of northwestern New York.* By John Theodore Horton et al. New York: Lewis Historical Publishing Co.

———. 1955. The legend of the serpent: 1855–1955. *Historical Wyoming* 8, no. 4 (July): 115–21.

Fielding, Todd. 1998. It came from Silver Lake. *Daily News* (Batavia, N.Y.), July 25.

History of Wyoming County, N.Y. 1880. New York: F. W. Beers and Co.

Keel, John A. 1970. *Strange creatures from time and space.* Greenwich, Conn.: Fawcett Publications, 254–59.

Kimiecik, Kathy. 1988. The strange case of the Silver Lake sea serpent. *New York Folklore* 9, no. 2 (summer): 10–11.

Kopp, Jon. 1998. Interview by Joe Nickell, September 18.

The legend of the Silver Lake sea serpent. [1984.] Silver Lake, N.Y.: Serpent Comics and Print Shop.

Mackal, Roy P. 1980. *Searching for hidden animals.* Garden City, N.Y.: Doubleday, 209–10.

Peace, Carolyn. 1976. The Silver Lake sea serpent. *Buffalo Courier-Express,* May 16.

Penrod, Bruce. 1998. Interview by Joe Nickell, September 14.

Perry, New York, as it was and is. 1976. Perry, N.Y.: Perry Bicentennial Committee.

Pickett, Thomas J. 1998. Personal communication, September 18.

Roberts, Frank D. 1915. *History of the town of Perry, New York.* [Perry, N.Y.]: C. G. Clarke and Son, 184–203.

Scott, Sir Walter. 1815. Letter quoted in Binns 1984, 186–87.

The Silver Lake serpent. 1855. *Wyoming Times,* September 26 (citing earlier issues of July 18–September 19).

The Silver Lake serpent: A full account of the monster as seen in the year 1855. 1880. Castile, N.Y.: Gaines and Terry.

Silver Lake serpent revived for Jaycee festival. N.d. Clipping ca. 1960s, vertical file, Perry Public Library.

Vogel, Charity. 1995. Perry recalls fishy tale of sea serpent. *Buffalo News,* July 22.

5

Lake Crescent

Lake Crescent is a picturesque body of water in northeastern Newfoundland near the small town of Robert's Arm (figure 5.1). Settlement of the area dates to the 1870s, although native peoples, including the Beothuk Indians, were early visitors. Robert's Arm (formerly Rabbit's Arm) has a population of about a thousand. The scenery is gorgeous, with walking trails snaking over lush green hills and around the placid lake. Deep and cold, Lake Crescent is allegedly home to Newfoundland's own lake monster, affectionately known as "Cressie" (figure 5.2).

Local Indian myths and lore are often cited by cryptozoologists as evidence for the existence of mysterious creatures. As we have seen, this is the case with other lake monsters, including Champ and Memphre, and Cressie is no exception. Indian legends tell of two entities supposedly related to Cressie: the *woodum haoot* ("pond devil") and the *haoot tuwedyee* ("swimming demon"). Several sources make this claim (e.g., Kirk 1998; Eberhart 2002), and it is tempting to marshal old native stories and legends into modern evidence. However, one must be careful. Our own Western folklore tradition includes fantastic creatures from long ago, such as fairies and leprechauns, but these stories are not meant to be taken literally. References to the *woodum haoot* and *haoot tuwedyee* seem to have been simply copied from one source to another, and the connection to Cressie has never been verified.

SIGHTINGS

To date, the Lake Crescent monster has not been photographed. Virtually all the evidence for Cressie's existence comes from eyewitness sightings and reports. Of course, in order for Cressie to exist, there would

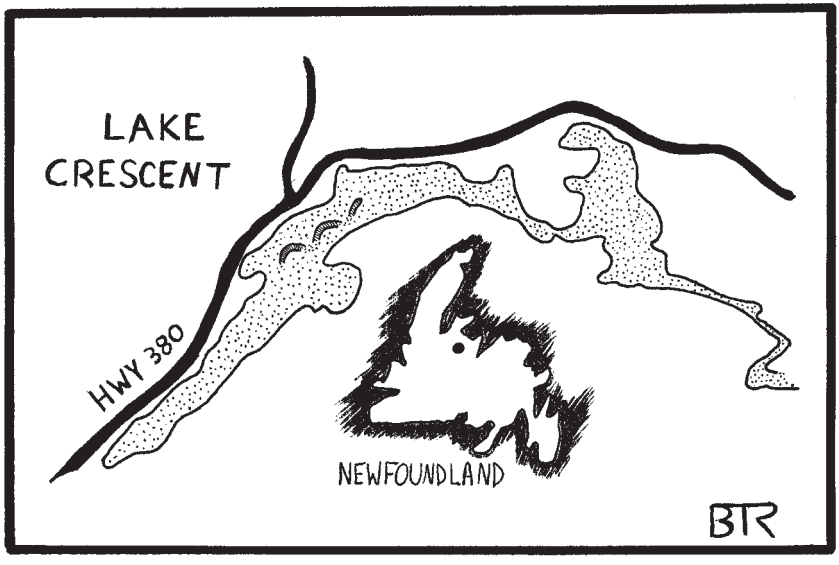


Figure 5.1 Near the small town of Robert's Arm, Lake Crescent touts its own lake monster and has been called the "Loch Ness of Newfoundland." (Map by Benjamin Radford)

have to be a breeding population of the animals, probably a dozen or more. Although there has been no organized, sustained effort to verify the creature's existence, no hard evidence—bones, live specimens, or carcasses—has been found. As of this writing, there have been about a dozen Cressie sightings since the 1940s. Of these, only a handful are detailed enough to be significant.

According to an information plaque on Cressie:

> In the local oral tradition, sightings of Cressie go back to the turn of the century when one of Robert's Arm's first residents, remembered today as "Grandmother Anthony," was startled from her berry picking by a giant serpent out on the lake. In another daylight sighting of the early 1950s, two local woodsmen on the shores of the lake noticed what they thought was a boom log [one of several large logs wired or cabled together by "eyes" in the end to create a boom—used to hold pulpwood together

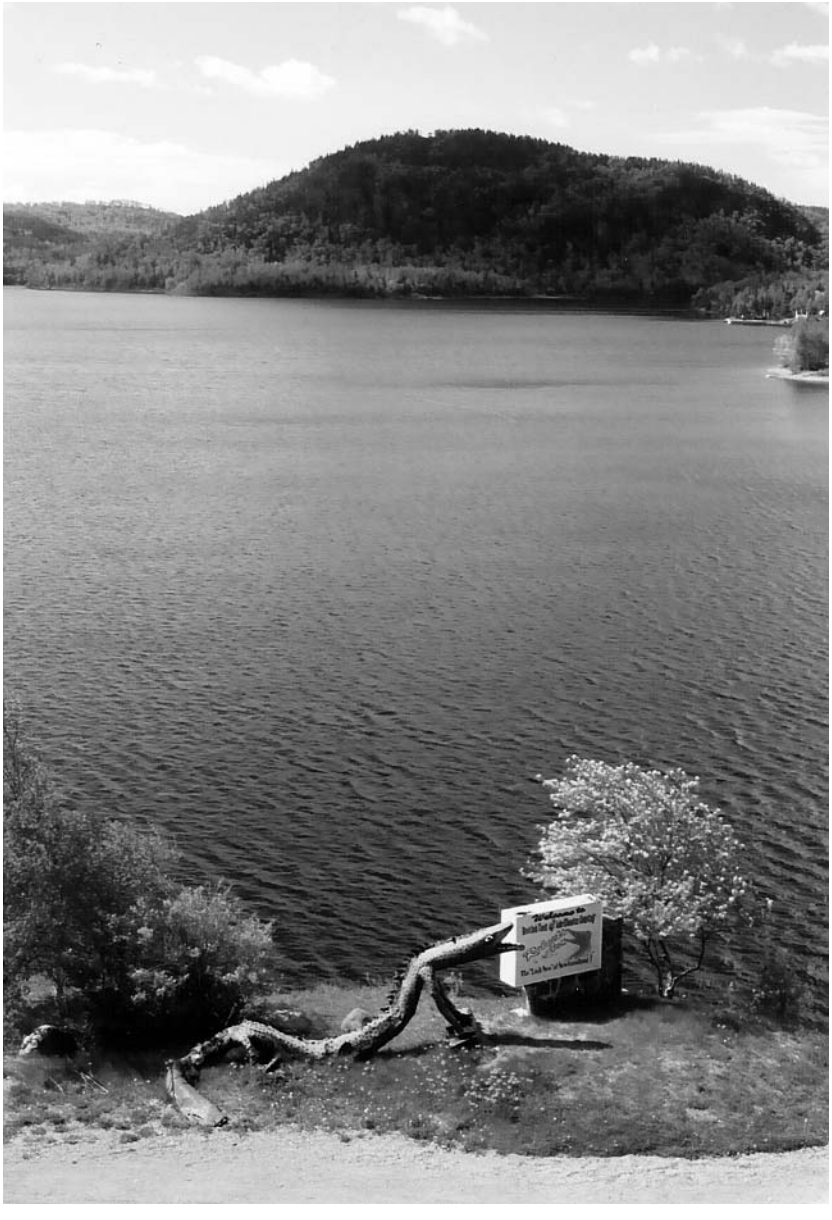


Figure 5.2 A terrifying beast looks out over beautiful Lake Crescent. (Photo by Benjamin Radford)

> as it's floated down a lake or river] just off shore. Puzzled that it was drifting into the wind, the men motored hurriedly out in time to witness the upturned "log," now huge, black, and rounded, slip beneath the waters of the lake. One of the gentlemen, Mr. Andrew Burton, long since retired, recalls that they wasted no time in regaining the shore. (Cressie's Castle sign n.d.)

It should be noted that other sources give somewhat different details of the sighting—for example, placing the year as 1946 instead of the early 1950s and involving three eyewitnesses, not two. Burton described the object as about twenty-five feet long and a foot in diameter. Though it was at first thought to be a log, Burton said that it didn't act like one: "A boom log would not have sunk suddenly out of sight or travelled against the wind" (Burton n.d.). (This observation is incorrect; see chapters 2 and 7.)

The sign continues:

> On Thursday afternoon, September 5th, 1991, at approximately 4:30 p.m., Mr. Pierce Rideout, a resident of Robert's Arm, was driving his pickup truck at the approach to that town when he noticed a disturbance on the surface of Crescent Lake. He observed through the open window of his truck what seemed to be the bow wave of a small boat about 150 yards off shore, or three-quarters the way from the small beach near Warr's Service Station and the forested point of land across the lake. It appeared to Mr. Rideout that a slowly moving object had just dropped below the surface, but as he watched, it rose to sight again: a black, fifteen foot long shape pitching forward in a rolling motion much as a whale does but with no sign of a fin, "sail," paddle, or fluke. Nor did it show a head or a neck. It then sank out of sight and did not reappear.

On July 9 of that same year, Fred Parsons left Robert's Arm with his wife at around noon. As he drove along the lake, he saw something in the water perhaps a hundred yards out. "What I saw was like a long,

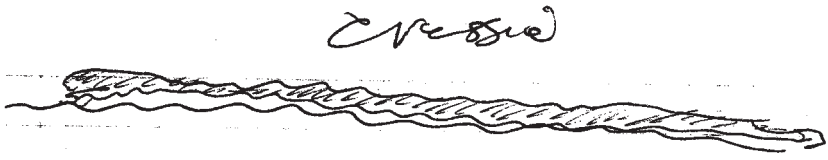


Figure 5.3 Fred Parsons's sketch of his lake monster sighting: "it was about fifteen or twenty feet long and had a dark brownish color." (Illustration by Fred Parsons for Benjamin Radford)

snakelike creature on the water," he told me. "It was about fifteen or twenty feet long and a dark brownish color. . . . It was a long, sleek body without any significantly large head, basically right on the water. It was basically right level with the water, just lying there, you know" (figure 5.3). He glimpsed it only briefly, and by the time he realized that he might have seen Cressie, he had passed it by. Parsons (2003) believes that it's "quite possible" that Cressie is a giant eel. "What I saw indicated it was an eel-like creature. No question about that . . . but still we have a lake monster" (figure 5.4).

Figure 5.4 Fred Parsons points to where he sighted Cressie, off Highway 380 near the town of Robert's Arm. (Photo by Benjamin Radford)

In the years since his sighting, Parsons has become the area's resident collector of lake monster reports, following up on sightings and interviewing witnesses. In recent years, other sightings (all essentially describing the same long, snakelike shape) have occasionally been reported. On August 1, 2003, Cressie was sighted in the lower part of the lake by French teacher Jill Warren and several other town residents.

Some reports are difficult to decipher and even harder to take literally. Consider, for example, one local man's description of his sighting: On July 15, 2000, Lawrence Morgan and his wife, driving along the lake, saw something that they first thought was a speedboat. It vanished, and when it reappeared, "it was traveling so very fast and the spray was really flying, as though it was after something." Because it was quite a distance away ("closer to the other side of the lake"), the couple had difficulty making out what it was. "The sun was shining on it and the large fin looked like silver, it shone so bright" (Morgan 2000).

What are we to make of this sighting? The report has been mentioned in several published accounts, and the eyewitnesses' character and credibility have been widely attested to (Morgan is a World War II veteran). However, with very few exceptions, eyewitness credibility is not the issue. "There's several locals who have spotted it and the fact of the matter is they've got nothing to lie about, they're honest people," Parsons (2003) told me. But even entirely credible teachers, priests, and war veterans can be mistaken. There are at least two major elements in this sighting that suggest that whatever these people saw, it wasn't Cressie. First, and most obvious, a living lake creature is unlikely to reach the fantastic speeds necessary to be compared to a speedboat. Many animals can swim at great speeds underwater, but to reach that speed on the surface—and, according to the eyewitnesses, kick up spray—is unheard of. Second, the eyewitnesses specifically mention a fin, but virtually no other sightings include this feature. It's also curious that a feature as small as a fin would be discernible from such a great distance.

At this remove, there's no way to know exactly what the object was. Could it have been a speedboat or a personal watercraft? The witnesses said that it was a warm and pleasant day, and at first they thought it was just someone out enjoying the lake. The fact that the large fin shone like

silver suggests that the object was metallic, as might be found on a small watercraft. Given the distances involved, and the possible vision problems that might plague a World War II veteran, such a mistake seems at least possible.

This doesn't mean that this sighting is worthless or irrelevant to Cressie. Quite the contrary, it is very instructive, for it shows us that some sightings that are almost certainly not Cressie are reported as evidence for the monster. Lake monster reports take a wide variety of forms; anything strange, odd, or mysterious seen in the lake is likely to be interpreted as the creature. People tend to see what they wish or hope to see, and once locals and tourists become aware of the "monster," they are likely to see monsters even when there are none.

One piece of local lore involves a large hole that was found in the lake's ice one winter in the early 1980s. Although some speculated that it was made by Cressie, divers searched part of the lake and found nothing unusual. As for Cressie's involvement, Mayor Robert Haggett dismissed it as a good-natured joke: "Somebody spread the rumor around that a monster had surfaced."

CRESSIE CANDIDATES

One thing that virtually all the witnesses agree on is that Cressie is dark and eel-like in appearance. George Eberhart, in his excellent encyclopedia *Mysterious Creatures,* suggests that Cressie might be an oversized American eel *(Anguilla rostrata).* Indeed, "the lake and surrounding ponds are famous for their population of abnormally large" eels (www.gabourgeois.com). One source claims that "a giant conger eel was seen by four loggers boring its way through a sandbank" in the summer of 1960 but provides no further details (Mr. X 1986).

Such eels typically grow to less than five feet, but Robert's Arm writer Russell Bragg (1995) notes that "RCMP [Royal Canadian Mounted Police] divers . . . may have accidentally discovered related 'monsters' while investigating an unfortunate drowning accident in another similar-sized lake in the area, South Pond. They returned to the surface with descriptions of giant eels as thick as a man's thigh. Many believe Cressie to be such a creature."

Though writer John Kirk (1998) describes the eel hypothesis as "tenuous at best," it is by far the most likely explanation, and the most popular one among longtime residents and eyewitnesses. Robert's Arm senior citizen Hughie Ryan says, "I think [the monster is] all nonsense. But there are some big fish in the lake, and I think there may be a giant eel in there." Says seventy-year-old lifelong resident Ray Hewlett, "Some of the old fellers used to see it, they say. A giant eel they used to say, years ago" (Power n.d.). As Parsons (2004) told me, "It was only recently that a couple of trappers/fishermen were granted permission to set out eel traps in the lake. They successfully secured a high number of them." There is thus little doubt that the lake has many eels, so it isn't such a stretch to think that Cressie, the "eel-like" lake monster, actually *is* an eel. Otters are also very common in and around the lake, and as Joe Nickell has pointed out in earlier chapters, otters can be (and have been) mistaken for lake monsters.

Locals offer several other explanations, including floating or drifting trees and logs. There is no question that the lake contains countless sunken logs. After all, it was used for decades to transport well more than half a million cords of pulpwood that was harvested from the area and shipped to large paper mills in Europe. I spoke with several people who thought that logs were a likely explanation.

Some sightings may be triggered by bubbles of gas from the decomposing pulpwood littering the lake bottom, which bring the logs to the surface. After years of tree traffic, the resulting tree rind (several feet thick) has settled along the bottom of the lake. The rind sometimes traps air, and the gas and air mixture then explodes. According to Ray Hewlett, "I heard fellows say that years ago the big waves would come up. The air and rind down in the bottom used to burst" (Power n.d.). (For an explanation of a similar process at Lake Champlain, see chapter 2.)

TOURISM

The tourism potential of their local monster has not been lost on the officials and citizens of Robert's Arm and the Beothuk Trail Tourism

Committee. In fact, the town has done much to publicize itself as a lake monster tourist destination. The entire province has suffered economically from the dying timber industry and the depletion of cod fisheries, and tourism is being promoted like never before. The main effort began in the early 1990s, when local resident Russell Bragg created a sign welcoming visitors to "The 'Loch Ness' of Newfoundland!" In addition to the sign, a stylized, full-size (?) model of Cressie greets tourists with fearsome teeth and a distinctly dragonlike countenance (figure 5.5). A quarter mile or so down the road, you'll find the Lake Crescent Inn, run by Evelyn and Bruce Warr. As their brochure says, "Bring your camera! You just might see Cressie, our lake monster." If you don't see the beastie from the hotel, a twenty-minute walk along the lake will bring you to Cressie's Castle, a scenic area created especially for lake monster watching. It's outfitted with wooden benches, a boardwalk, and an information plaque on Cressie. Of course, there are also the requisite Cressie art contests, Cressie parade floats, and so on.

Figure 5.5 A life-size statue of Cressie the lake monster welcomes visitors to Robert's Arm and the Beothuk Trail. (Photo by Benjamin Radford)

CONCLUSION

As with other reported lake monsters, it's a mistake to look for only one explanation for all the Cressie sightings. In truth, there are many things in the lake—living and otherwise—that might double as large lake creatures. The sightings are probably a mixture of misidentifications, floating logs, large fish, otters, and perhaps even giant eels. It's also possible that Cressie is a prehistoric survivor or a fantastic creature unknown to science, but there's no evidence for such a claim. If a group of unknown creatures has existed in the lake for centuries (accounting for the Indian legends), it's difficult to explain why there have been so few sightings. Crescent is a relatively small lake along a highway next to a small town, yet sightings date back only sixty years, averaging one every five years.

Whether fish, log, tree rind, giant eel, or unknown monster, Cressie's true identity is mostly irrelevant to the residents of Robert's Arm. Whether it lurks in the waters of Lake Crescent or not, the creature certainly exists in the hearts and minds of this small Newfoundland community. Like many lake monsters, Cressie is used as the local bogeyman: "mothers threaten misbehaving children with, 'Be good, or the monster in the lake will get you!'" (Bragg 1995). A poem, written by the fourth-grade class at Crescent Elementary, celebrates their town and the local monster: "Come home to Robert's Arm / It's the place to be / There's places to go / And old friends to see / Go for a boat ride / Or swim in Crescent Lake / But watch for old Cressie / Who's lying in wait."

REFERENCES

Bragg, Russell A. 1991. *Beothuk Times: Newsletter of the Beothuk Trail Tourism Committee,* vol. 2, no. 2 (summer).

———. 1992. *Beothuk Times: Newsletter of the Beothuk Trail Tourism Committee,* vol. 3, no. 1 (summer).

———. 1995. Have you seen Cressie? In *Remembrances of Robert's Arm: Come home year 1995.* By Wanda Jackman, Bonnie Warr, and Russell A. Bragg. Corner Brook, Newfoundland: Western Star Publishers.

Burton, Andrew. N.d. Quoted in *Moments in time,* tourism brochure, 351.

Cressie's Castle sign. N.d. Tourist information sign located at Cressie's Castle on the shore of Lake Crescent. Adapted from Bragg's *Beothuk Times* articles (1991, 1992).

Eberhart, George. 2002. Cressie. In *Mysterious creatures: A guide to cryptozoology.* Santa Barbara, Calif.: ABC-CLIO.

Kirk, John. 1998. *In the domain of the lake monsters*. Toronto: Key Porter Books.

Morgan, Lawrence. 2000. Handwritten account of Cressie sighting. Author's collection, provided by Fred Parsons.

Mr. X. 1986. A mari usque ad mare. *Fortean Times* 46 (spring): 49.

Parsons, Fred. 2003. Interview by Benjamin Radford, June 23.

———. 2004. Correspondence with Benjamin Radford, February 18.

Power, Jennifer. N.d. What lurkes in Crescent Lake? *Norwester* newspaper.

This page intentionally left blank

6

Lake George

Called "one of the grandest hoaxes of all times" (Lord 1999, 187), the Lake George monster has occasionally resurfaced (figure 6.1) since its debut at Hague Bay, New York, in 1904. In 2002 and 2003 I investigated the historic case and even examined what is purported to be the original fake monster. I also investigated the possibility of a real leviathan in Lake George. The findings are fascinating and revealing.

THE ORIGINAL HOAX

Located near the southern end of Lake Champlain, Lake George is a placid, thirty-two-mile-long lake in western New York's Adirondack region. There, at Hague Bay in 1904, artist Harry Watrous (1857–1940) repaid a prank that had been played on him.

Watrous, a well-known genre painter and onetime president of the National Academy of Design, had made a wager with Colonel William Mann, editor of *Town Topics,* a New York scandal sheet. The men were competing over who could catch the largest trout, and one day Mann held up what appeared to be a thirty- to forty-pound specimen as his boat passed Watrous's. However, the artist later determined that the fish was a painted wooden fake, and he hit on a scheme to out-trick the trickster (Bolton n.d.; Henry n.d.).

Thirty years later, Watrous (1934) recalled:

Figure 6.1 The apparently original fake monster used in a 1904 hoax is shown here emerging from Lake George in a later re-creation of the incident. (Photo by Walter Grishkot; copy courtesy of Lake George Historical Association Museum)

While the Colonel was in New York attending to business during the week ending June 27, 1904, I got a cedar log and fashioned one end of it into my idea of a sea monster or hippogriff. I made a big mouth, a couple of ears, like the ears of an ass, four big teeth, two in the upper and two in the lower jaw, and for eyes I inserted in the sockets of the monster two telegraph pole insulators of green glass.

I painted the head in yellow and black stripes, painted the inside of the mouth red and the teeth white, painted two red places for nostrils and painted the ears blue. The log of which I fashioned the head was about ten feet long. To the bottom of the log I attached a light rope which I put through a pulley attached to a stone which served as an anchor. The pulley line was about 100 feet long and was manipulated from the shore.

The artist continued:

> Well, I went out and anchored the hippogriff close to the path which Col. Mann's boat would have to take from the landing to his island. I tested the monster several times, sunk it and waited for Col. Mann and his party to arrive on Saturday afternoon. The Colonel had as his guests Mr. Davies, Mrs. Bates and several other congenial spirits. Hidden behind a clump of bushes on shore I watched as the launch approached and just as it was about ten feet away from my trap I released the monster. It came up nobly, the head shaking as if to rid itself of water, and I will say that to several people in Col. Mann's boat it was a very menacing spectacle.
>
> Mr. Davies, who had a rather high pitched voice, uttered a scream that must have been heard as far away as Burlington, Vt. Mrs. Bates, a very intrepid lady, of Milesian extraction, stood on a seat in the boat and beat the water with her parasol, shouting indistinguishable sentences in her native tongue. Col. Mann shouted, "Good God, what is it?" through his whiskers and kept repeating his query as long as the boat was in sight. As soon as I gave the audience a good look at the hippogriff I pulled it down to the bottom of the lake again.

Watrous concluded:

> Although Col. Mann's home was on an island, the news of the sea serpent was all along the shore of the lake that night. Taking advantage of the darkness of night, I moved the monster from place to place along the lake shore and everybody who saw my monster had a new story to tell of its awe-inspiring appearance. Each day we provided new thrills for the populace, and that is how the rumor started that there was an honest-to-goodness sea serpent living in Lake George.

RESURFACINGS

News of the incident spread across the state. One of the sites where Watrous reportedly located the hippogriff on subsequent nighttime excursions was near a local hotel, the Island Harbour House. According to a local tale (Henry n.d.):

> A young couple honeymooning at the hotel had gone out for a moonlight canoe ride when the monster surfaced close to their canoe, causing it to capsize. The groom, unable to keep his wits about him, swam to shore, leaving his bride to fend for herself. She eventually made her way to shore, stormed into the hotel and packed her bags, announcing not only the end of the honeymoon but also for the marriage. It is reported that she was actually grateful to the serpent for showing her that the true monster was her (soon to be former) husband.

Three decades later, Watrous was asked to reenact his hoax for an Independence Day carnival. According to the *Daily News,* the elderly artist agreed and brought his hippogriff out of "hibernation." Watrous set up his contraption and, during one of the celebration's water events, spooked a boatful of onlookers. The incident was said to be the highlight of the carnival. Watrous boasted, "I spoofed the world once with the horrendous beast; and I spoofed it again this afternoon" (Lord 1999, 189).

RESEARCHING WATROUS'S MONSTER

Ben Radford and I were able to view what is purportedly Watrous's original hippogriff—dubbed "George"—in August 2002. We visited Lake George Village to see the wooden fake, displayed at the Lake George Historical Association Museum. Unfortunately, that monster was a fake once removed, a copy of the alleged original. The latter was housed—at least temporarily—in a display case at the Hague Community Center, and Ben and I were graciously allowed to photograph and even measure the artifact (figure 6.2). The following year I paid another

visit, conducted original research, and took additional photographs. I also visited the former Watrous mansion, now a bed-and-breakfast named Ruah. The proprietor, Peter Foster, kindly showed me the lakeside rock with an embedded eyebolt to which Watrous supposedly fastened his contraption's pulley line (figure 6.3).

Figure 6.2 "George" the monster poses with Joe Nickell in Hague-on-Lake George, New York. (Photo by Benjamin Radford)

Figure 6.3 Eyebolt embedded in a rock on the old Harry Watrous property, reportedly used to secure the pulley line that operated his bogus monster. (Photo by Joe Nickell)

During my research, I discovered some discrepancies between the supposedly original hippogriff and Watrous's description of it. Whereas he stated, "The log of which I fashioned the head was about ten feet long" (Watrous 1934), the displayed creature is less than half that length, measuring just fifty-two inches. As further investigation revealed, however, the monster had been fashioned in two sections, fitted together with "a half lap join" and secured by a bolt, according to Phil Kellogg (2004), who made the replica; only the front end of the figure is exhibited.

Another discrepancy is the lack of ears. Watrous (1934) provided his monster with "a couple of ears, like the ears of an ass," which he painted blue, but the existing creature has no ears. A slot cut in the top of the head, however, is a likely attachment site for such ears. I suspect that they were fashioned out of sheet metal, like the back fin.

The bottom edge of the fin bears flanges, made by snipping the metal and bending the sections at alternating right angles, then nailing them down. Old flange imprints and nail holes in the wood show that, at some time in its history, the fin was reworked or replaced. In much the same way that art experts differentiate an original painting from a copy by evidence of alterations made during creation, changes in the fin placement suggest that the artifact is the original, with a history of use and abuse. Other details, including the missing ears and evidence of repainting, flaking paint, damage, and repair, are all consistent with the object's purported age and function. I also attempted to date the glass insulators used for the monster's eyes. I had intern Robert Lewis contact a person knowledgeable about such things, and he said that the pair appeared to be telephone or toll insulators of about the period in question, although he was unable to personally examine them and take definitive caliper measurements (Katonak 2004).

There is one additional detail: the presence of a U.S. Customs label affixed to the monster's underbelly (figure 6.4.) Therein lies a tale: Walter Grishkot (2004) told me that he first came across the object in about 1962 in the garage of an elderly caretaker named Louis Spelman in Silver Bay. Reportedly, Spelman had discovered the relic decades earlier during the sale of some property in town (Henry n.d.). Grishkot

borrowed the monster from Spelman and had a black-and-white photo made of it emerging from water (see figure 6.1). Following some newspaper publicity, a woman in the Virgin Islands purchased the monster from Spelman for just twenty-five dollars (Bolton n.d.; It's monstrous 1962). In 1966, Grishkot and his wife Joann were on a Caribbean cruise and looked up the woman who had bought the monster. They brought it back so that it could be displayed locally. Walt recalls that it was too long to fit in their rental car, so he had to remove the bolt and divide the object into its two segments. The couple had some difficulty getting the artifact through customs, as the officials were unsure how to estimate the duty, there being no category for "monster" (Grishkot 2004; Henry n.d.; Bolton n.d.).

Whatever the true status of the "original" hippogriff—and I am cautiously prepared to accept it as authentic—Harry Watrous's prank takes its place among many other monster hoaxes. Some of the ones I discovered during my research, including two from the 1930s, specifically echo the 1904 hippogriff hoax. In 1934, for example, Canadian

Figure 6.4 Detail of the "creature" showing elements related to its authentication: U.S. Customs sticker and old fin-attachment markings. (Photo by Joe Nickell)

bathers saw a monster in Lake Ontario near Kingston. They described "Kingstie" as "a strange creature with the head of a dragon and eyes of fire." Finally, in 1979, three local men confessed that they had been responsible for the incident. "As a prank," reports one writer, "they had fabricated a semblance of the creature using a barrel filled with empty bottles for buoyancy and fitting it with a dragon-like head, rope and anchor to keep it in one place, and twine attached to the rope that ran underwater to the shore of Cartwright Bay to permit them to bob its barrel body and head up and down" (Colombo 1999, 117).

Still another 1930s mystery was solved with the discovery—on a beach at Ludington, Michigan—of the remains of a wooden monster thirty feet long. Reports one writer, "Made in numerous sections and wired together, it gave the appearance of swimming when pulled through the water. It was effective enough to scare many local swimmers and spawned monster stories for years to come" (Stonehouse 1997, 163).

SIGHTINGS

Watrous's hoax aside, there have been intermittent reports of a real monster in Lake George. Interestingly, the single case of a "real" sighting reported by Lord (1999, 188–89) also involved a Mrs. Bates—possibly the same one in the party hoaxed by Watrous. If so, that seems quite a coincidence—or two variants of the same story. However, when I stayed at Silver Bay, I spent some time looking for, and inquiring about, monster sightings. They seem to be a thing of the past.

Mark Rutkowski, senior program director of the Silver Bay Association, told me that in his fifteen years in the area, he had no knowledge of any monster reports. A maintenance man and the nature center operator likewise had no monster stories to report, although one staffer told me that she had recently seen "either an otter or a mink" with a fish in its mouth, and others have definitely seen mink in the area (Nickell 2003). Such animals could be mistaken for a lake creature under the right conditions.

CONCLUSION

It appears that the only true specimen of "George" is the one that is safely preserved behind glass—verily a creature to behold.

REFERENCES

Bolton, Richard E. N.d. George the monster. Information sheet by supervisor, township of Hague, Warren County, N.Y.

Colombo, John Robert. 1999. *Mysteries of Ontario.* Toronto: Hounslow Press.

Grishkot, Walter. 2004. Telephone interview by Joe Nickell, June 18.

Henry, Ginger. N.d. *The Lake George monster story.* Hague, N.Y.: Hague-on-Lake George Chamber of Commerce.

It's monstrous, "George": Public invited to bid farewell to the monster of Lake George. 1962. *Ticonderoga (N.Y.) Sentinel,* November 15. Cited in Zarzynski 1980.

Katonak, Tom. 2004. Personal correspondence with Robert Lewis, June 29.

Kellogg, Phil. 2004. Telephone interview by Joe Nickell, June 18.

Lord, Thomas Reeves. 1999. *Still more stories of Lake George: Fact and fancy.* Pemberton, N.J.: Pineland Press, 187–89.

Nickell, Joe. 2003. Interview notes, Silver Bay, N.Y., August 27.

Stonehouse, Frederick. 1997. *Haunted lakes: Great Lakes ghost stories, superstitions and sea serpents.* Duluth, Minn.: Lake Superior Port Cities Inc.

Watrous, Harry W. 1934. Is there a sea serpent in Lake George? Flyer reprinted from official program, Lake George Gold Cup Regatta, August 3–5; itself reprinted from *New York Evening Sun.* Copy obtained from Hague Historical Museum.

Zarzynski, Joseph W. 1980. The Lake George monster hoax of 1904. *Pursuit* (summer): 99–100.

This page intentionally left blank

7

Lake Okanagan

Lake Okanagan in British Columbia is said to be home to "Ogopogo," purportedly "one of the most thoroughly documented unidentified lake creatures," second only to Scotland's "Nessie," and "possibly the most famous North American monster aside from Bigfoot" (Blackman 1998, 69). Although Ogopogo has been dubbed Canada's Loch Ness monster, cryptozoologist John Kirk (1998, 4) counters that, "since the appearances of the Canadian beast predated those of its Scottish cousin, it ought to be said that Nessie is Scotland's Ogopogo." But does such a monster exist?

The Ogopogo Expedition

Joe Nickell

Ben Radford and I have long been fascinated by the alleged Lake Okanagan denizen, and we resolved to look into the mystery. As luck would have it, National Geographic Television was interested as well.

BACKGROUND

Okanagan is the largest of a group of five interconnected lakes in the Okanagan Valley of south-central British Columbia. Named for the local forest-dwelling Native Americans, the narrow freshwater lake stretches for some seventy-nine miles from its southern extremity at Penticton to its northern tip near Vernon (figure 7.1). It is thus more than three times the length of Loch Ness and, at a maximum depth of

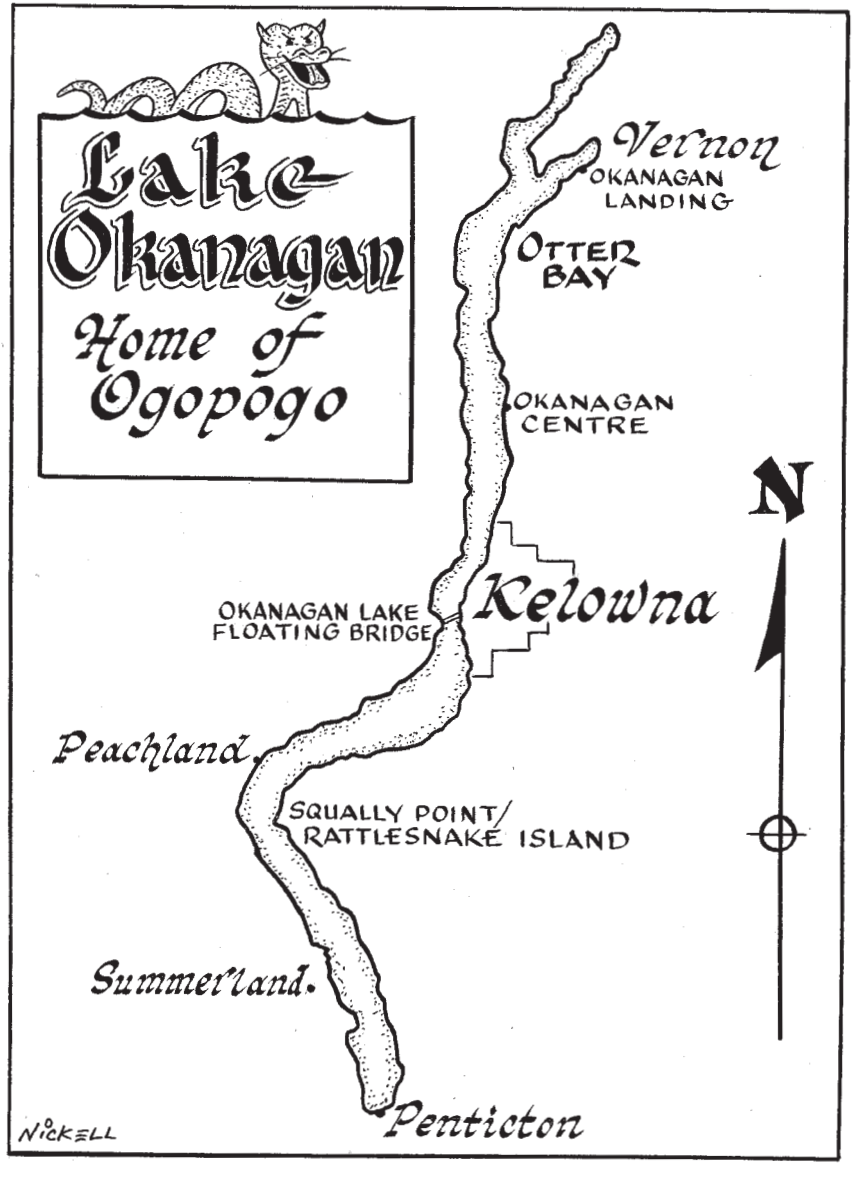


Figure 7.1 Map of Lake Okanagan showing selected sites. (Map by Joe Nickell)

762 feet, slightly deeper as well. (Greater depths have been claimed; according to Gaal [2001, 14], the deepest point of Lake Okanagan is "nearly 1,000 feet.") Formed from an ancient valley, it was filled by waters from glacial melting about ten thousand years ago (Roed 2005).

Okanagan is one of many Canadian lakes reputed to contain lake monsters. At least thirty-nine lakes in British Columbia alone have such "aquatic anomalies," according to Kirk; however, he singles out Okanagan as "the lake of mystery" (Kirk 1998, 28, 11). The scenic lake rarely freezes over—this has happened only about four times in the twentieth century (Okanagan 2005a)—and it is famous for its sandy beaches, campsites, and resorts. Fishing charters promise "big fish," which include rainbow trout and kokanee (Okanagan 2005b). Lake Okanagan is within the home range of such aquatic mammals as beavers, muskrats, and otters (Whitaker 1996), as well as numerous types of waterfowl, including ducks and geese (Bull and Ferrand 1994). Some of these creatures might provide food for a giant lake monster, if it indeed exists.

According to folklore attributed to the native culture, the monster was a demonic entity called N'ha-a-itk (Ben discusses this in greater detail in the second part of this chapter), and its home was Rattlesnake Island or a cave beneath it or adjacent to Squally Point (Gaal 2001, 113, 122–23; Kirk 1998, 47). With the arrival of white settlers, interest in the Okanagan monster continued, though it was not always taken seriously. The palindromic name Ogopogo (it reads the same forward and backward) came from a 1924 music-hall song titled "The Ogopogo: The Funny Fox-Trot," about a banjo-playing water-being from Hindustan (Shuker 1995, 100). It was performed at a luncheon in Vernon, B.C., on August 23, 1926. And according to an account I discovered at the library in Kelowna, "the guests left the Kalamalka Hotel to spread the fame of Ogopogo far and wide" (Brimblecombe 1930). (Others have misreported the facts about the song. For example, Blackman [1998, 71–72] says that W. H. Brimblecombe wrote the song, and Gaal [2001, 88] says that it was sung at Vernon in 1924.)

ON-SITE INVESTIGATIONS

National Geographic Television (NGTV) invited Ben and me on an expedition to Lake Okanagan—a week's quest to find the fabled creature or to explain the monster phenomenon. We spent more than four days at the lake investigating the mystery by interviewing eyewitnesses; studying photographic evidence; conducting historical and other research (although much of this was done in advance); performing an experiment involving one of the recorded sightings; and traversing the lake and its shores by foot, auto, sonar-equipped boat (with professional divers on board), and seaplane.

Accompanying us for much of this grueling work was Canadian cryptozoologist John Kirk. We were also assisted by Arlene Gaal, whose book *In Search of Ogopogo* was never far from our fingertips. In her home in Kelowna, she allowed us to study many of the photographs, films, and videos that purport to depict Ogopogo. Despite our skepticism, our relationship with these two monster hunters was respectful and cordial; NGTV producer Noel Dockstader seemed to wish for more sparks between us, which would make for better television.

The second full day of our expedition—Saturday, February 5, 2005—was the most exhausting. After an early breakfast, we boarded a houseboat at the Grand Okanagan Lakefront Resort, where we roomed. We were loaded for monster hunting: besides Ben, John, and me, we had a four-person TV crew, the boat pilot and his relief, two men in charge of sonar, and a diving crew of three—plus an impressive amount of gear and equipment, including a motorboat that we towed behind us.

We covered much of the southern half of the lake, giving special attention to Rattlesnake Island (a.k.a. Monster Island) and its environs. Two divers went down to search for the caves that are legendarily home to Ogopogo (figure 7.2), while Ben, John, and I took the motorboat to the island and scrambled onto the rocks. These searches yielded only underwater fissures too small for a monster and an island devoid of bones or other traces of Ogopogo's supposed prey.

Figure 7.2 Divers with the National Geographic Television expedition in search of caves beneath Rattlesnake Island. (Photo by Joe Nickell)

Darryl Bondura searched the depths with side-scanning sonar, which also turned up nothing of significance (figure 7.3). He says that he has scanned several square miles of Okanagan's bottom—once identifying an ultralight plane at about a hundred feet deep—but has never seen a large lake denizen or even the skeleton of one (Bondura 2005). Two days later, Ben and I flew over the same area in a seaplane (figure 7.4), scouring the waters for any sign of Ogopogo. Despite the excellent view, Ogie was still a no-show.

Thus, much of our assessment of the Ogopogo phenomenon necessarily depended on the reports of eyewitnesses, including Gaal and Kirk. We also analyzed the numerous sightings chronicled by Gaal (2001, 185–208) and studied original photographs and film and video footage (see appendix 4 for more on that).

Figure 7.3 Side-scanning sonar search of a portion of the lake revealed no leviathan. (Photo by Joe Nickell)

Figure 7.4 Rattlesnake Island viewed from a seaplane. (Photo by Joe Nickell)

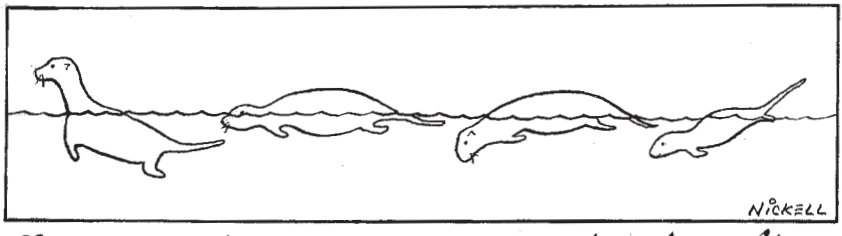
SIGHTINGS

In preparing for the trip to Okanagan, I studied the approximately 330 eyewitness sightings—dating from the eighteenth century to 2001—listed in the "Chronology" to Gaal's *In Search of Ogopogo* (2001, 185–208). Mentally, I rounded up the usual suspects: wake effects, bobbing logs, beavers, otters, schools of fish, and many others. Although sturgeon are a probable candidate for some Lake Champlain sightings, at Okanagan, their presence has not been established; indeed, rewards of up to $10,000 have failed to produce a single sturgeon (Gaal 2001, 19).

Since Susan Allison's sighting in 1872—the first by a white settler—eyewitness reports of Ogopogo have proliferated. Blackman (1998, 69) and others overstate the uniformity of the descriptions of Ogopogo; to me, they seem quite varied. For example, the color may be light to dark green, dark brown, brown-black, blackish gray, or jet black; at least one source mentioned a white underside. The skin has been described as smooth, snakelike, or shiny. The height out of the water ranges from three to seven feet, with some estimates of up to fifteen feet. The length is highly variable and includes small creatures dubbed "Ogopups" and larger animals from eight to seventy feet long. The head has been likened to that of a snake, sheep, cow, deer, or horse, with protrusions said to be horns or ears, and with beady eyes and whiskers. The body is said to resemble a log or a great snake, featuring "saw-edged coils" or one to several humps. Appendages reportedly include various fins, flippers, or webbed feet; sometimes it has a forked tail. The creature's movement is often described as "undulating," but it also frolics, splashes, swims rapidly, slaps the water with its tail, and so on (Gaal 2001, 185–208).

It seems extremely unlikely that the eyewitnesses were seeing a single type of creature—let alone that it was a plesiosaur, zeuglodon, basilosaurus, or any other extinct or unknown creature. However, by picking out some of the more common features and allowing for misperceptions and exaggerations, I was able to produce a composite drawing of Ogopogo and show its similarity to an otter—actually, several otters swimming in a line (figure 7.5). As with other lake monster habitats around the world, Lake Okanagan coincides with the habitat of otters,

Composite drawing of the Lake Okanagan monster.



Northern river otters, swimming in a line.

Figure 7.5 Composite drawing of Ogopogo (top) is compared with otters swimming in a line (bottom) (after Gould 1976, 116). (Drawings by Joe Nickell)

in this case, the northern river otter *(Lutra canadensis),* as shown in the *National Audubon Society Field Guide to North American Mammals* (Whitaker 1996, 782–85).

Of course, not all lake monster sightings are of otters. However, they may be responsible for some of the best sightings, such as the one in 1989 by John Kirk (1998, 52–53) and others: The animal was an estimated thirty-five to forty feet long and consisted of "five sleek, jet-black humps" and a lashing tail. It was moving very fast—perhaps, the eyewitnesses thought, twenty-five miles per hour. Although such an estimate is probably inaccurate, being based on multiple unknowns (e.g., the size of the "animal" and its distance from viewers), it should be noted that "otters are among the fastest swimmers of all animals," having a cruising speed of six miles per hour and the ability to go "much faster" (*Collier's Encyclopedia* 1993).

FILM AND VIDEO

Photographic evidence of Ogopogo is generally poor, as we found from perusing Arlene Gaal's collection. However, she showed us three film or video sequences that were of interest.

The Folden Film. This footage was shot by Art Folden in August 1968. Driving along Highway 97 with his family, he saw something moving in the water and pulled off the road to record the object with his 8mm movie camera. The result resembles a fast-moving log. Most observers believe that it's a swimming creature, although I think it could be two, one swimming behind the other. Folden estimated that the object was three hundred yards offshore, and Ogopogo enthusiasts have concluded that the object was very large and moving quite fast (Gaal 2001, 46–52; Kirk 1998, 47–48).

Ben sold NGTV on the idea of doing an on-site experiment involving the Folden film. We selected a site south of Peachland that Ben, John, and I agreed was either Folden's original site or a nearby one consistent with it. Briefly, the experiment involved placing a boat at varying distances from the shore, established by a surveying crew. The three of us agreed on an approximate offshore distance where Folden's creature would have been. The results demonstrated that the distance was far less than Folden had thought; therefore, estimates of the object's size and speed had to be reduced accordingly. (See appendix 4 for Ben's analysis of this and other films.)

The Thal Film. On August 11, 1980, some fifty tourists watched as Ogopogo performed for about forty-five minutes off the beach at Kelowna. Larry Thal of Vancouver shot some 8mm film of the event (Gaal 2001, 52–55). Unfortunately, the footage is only about ten seconds long, and "a large dark appendage that moves out of the water" (Gaal 2001, 54) appears to be one of the many defects of the old film. Gaal (2005a) conceded to me that the film might depict two creatures rather than just one; if so, I would suggest a pair of otters.

The DeMara Video. On July 24, 1992, Paul DeMara videotaped, off Kelowna, "something or some things" that were "traveling just below

the surface of the water at a fairly good speed, estimated at five miles per hour." Suddenly a boat appeared, towing a water-skier, and crossed the line of movement, whereupon the skier tumbled into the water. About five minutes later, DeMara saw and filmed what he termed "a similar anomaly" (Gaal 2001, 64), estimated by Gaal at thirty feet long and composed of three sections. Several minutes later came a third sighting of something moving underwater (Gaal 2001, 62–67). Gaal (2001, 62–66; 2005a) agrees that there were several "creatures" (she counted seven) in the first video sequence, and I think they look remarkably like otters. I also believe that rather than depicting a single three-section creature, the second and third sequences show otters swimming in a line.

An alternative skeptical view comes from an FBI video specialist, Grant Fredricks (2005), who analyzed the DeMara video and concluded that what he saw was "very consistent with debris from a fallen tree in the water . . . the objects very slowly bob up and down." He also pointed out, as we did, that the objects don't react to the approaching boat or skier, nor does the skier seem at all alarmed by the objects. This suggests that the skier recognized whatever was in the lake and knew that it was neither unusual nor a threat.

Yet another videotape, shot by Ken Chaplin on July 17, 1989, has been dismissed by wildlife experts as "most likely a large river otter or beaver" (Gaal 2001, 71), and Kirk is among many who agree (1998, 64).

CONCLUSION

Despite many sincere eyewitnesses, a critical look at the evidence yields no proof of a large unknown creature inhabiting Lake Okanagan. Mundane explanations can account for the reports, and the best sightings may be of northern river otters swimming in a line. They imitate the serpentine creature—an image inherited from sea monster tales and Native American legends—that people now expect to see, and that some do indeed perceive, on "the lake of mystery."

Ogopogo the Chameleon

Benjamin Radford

In our search for Ogopogo, the famous monster of Lake Okanagan, I had an idea of what to look for: a creature up to seventy feet long, with dark skin and a characteristic series of humps. Though I went in search of one monster, in a way, I found three. Ogopogo seems to have several distinct incarnations: as an Indian legend, as an elusive biological beast, and as a lovable local mascot. Each Ogopogo reflects the era and expectations of those who embrace it.

N'HA-A-ITK: THE INDIAN LEGEND

Because the evidence for lake monsters rests almost entirely on ambiguous sightings, fuzzy photographs, and a lakeful of supposition, native Indian tales have been used to suggest historical precedence for the creatures. Some lake monsters, such as Loch Ness's Nessie and Lake Champlain's Champ, are depicted as mysterious but fundamentally friendly beasties, playful and elusive. Not Ogopogo, or at least not the Indian stories on which it is supposedly based: that of the fearsome N'ha-a-itk (though the spelling *Naitaka* is common, I've chosen to use the more authentic spelling *N'ha-a-itk*). The N'ha-a-itk–Ogopogo link is firmly cemented in the creature's history and lore, and Ogopogo is more closely tied to native myths than is any other lake monster. Virtually all writers on the subject lump the two together, and in fact, most use the terms interchangeably. For example, "the Indian name for the animal was Naitaka," writes Peter Costello (1974, 222) in his book *In Search of Lake Monsters.* The definitive book on Ogopogo, *In Search of Ogopogo* by Arlene Gaal, is subtitled "Sacred Creature of the Okanagan Waters" and has a chapter titled "Native Legends of the Ogopogo." Noted lake monster hunter Roy Mackal (1980, 222) even goes so far as to state with certainty, "The Naitaka are real animals. . . . The term Ogopogo is of recent origin, whereas the Indian name Naitaka and its variations go back hundreds of years."

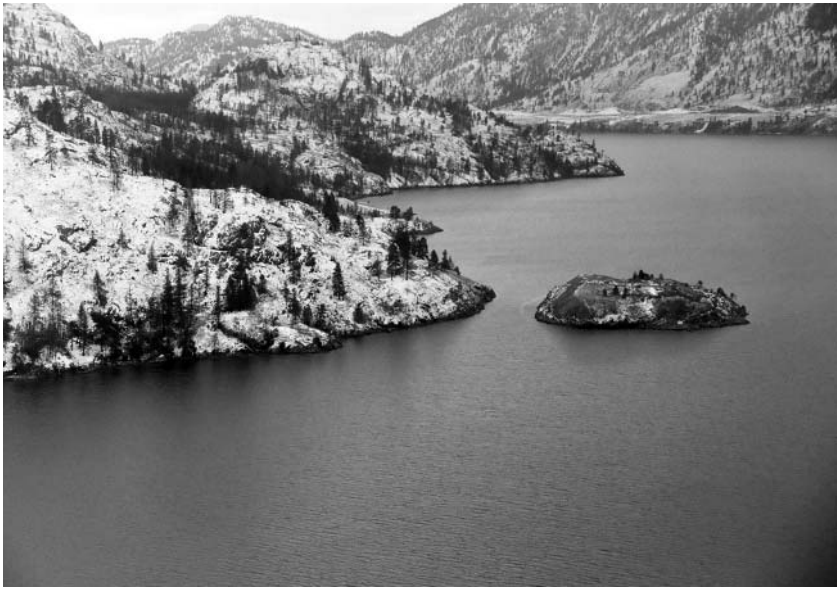


Figure 7.6 Lake Okanagan's Rattlesnake Island (a.k.a. Monster Island), the reputed home of Ogopogo. (Photo by Benjamin Radford)

N'ha-a-itk has various translations, including "water demon" or "lake monster." Many writers prefer to emphasize translations that suit their agendas (such as "snake in the lake"); other interpretations of the Indian word may be just as accurate but less amenable to conscription into lake monster mythos. Mary Moon (1977) gives other examples, such as "sacred creature of the water," "water god," and "lake demon." The creature would demand a toll from travelers for safe passage near its reputed home on Rattlesnake Island, a small, rocky clot in Lake Okanagan (figure 7.6). The fee was not just a bit of gold or tobacco but a sacrifice—a live sacrifice. Hundreds of years ago, whenever Indians would venture into the lake, they brought chickens or other small animals to drop into the water. The drowned fowl would sink into the lake's depths and ensure the travelers a protected journey. The island's rocky shore was said to be littered with the gory remnants of passersby who didn't make the sacrifice.

Indian traditions speak of Timbasket, the chief of a visiting tribe who paid a terrible price for challenging N'ha-a-itk. Historian Frank Buckland tells the story:

> Timbasket, the Indian cynic . . . declared his disbelief in the existence of the lake demon. He was told that the Westbank Indians intended to sacrifice a live dog to the water god as they passed Squally Point, but he was quite unimpressed. He knew too much to concern himself with outmoded customs. . . . [Later when crossing the lake] Timbasket defiantly chose to travel close to the rocky headland. Suddenly, the lake demon arose from his lair and whipped up the surface of the lake with his long tail. Timbasket, his family and his canoe were sucked under by a great swirl of angry water. (quoted in Moon 1977, 25)

This was the modus operandi for N'ha-a-itk: it would use its mighty tail to lash the lake's waters into a fierce storm that would drown its victims.

The white settlers apparently heeded the Indians' warnings, for the most part; when there were occasional lapses, they would be reminded of the wrath of N'ha-a-itk. In 1854 or 1855, a settler named John MacDougall is said to have neglected the sacrifice. While crossing the lake with a team of horses, a great force sucked his steeds down with a tremendous slurp. MacDougall was terrified when he realized that his canoe, lashed to the horses, was about to be pulled down to a watery doom as well. He grabbed a knife and cut the ropes, narrowly escaping with his life.

Moon (1977, 32) cautions those seeking retribution: "Anyone thinking of killing Ogopogo had better ponder the fate of the Lambton family. . . . During the first half of the fifteenth century, Sir John de Lambton killed a 'wyrm.' As a result of killing the monster, the Lambton family fell under a witch's curse: for nine generations no Lambton would die in his bed. None did. Some say the curse has pursued the Lambtons down to the 1970s." Thus black magic enters the Ogopogo story.

According to Moon, "The Indians . . . looked on it as a superhuman [supernatural] entity." Other writers agree, including W. Haden Blackman (1998, 71), who points out that the Sushwap and Okanakane Indians "believed that it was an evil supernatural entity with great power and ill intent."

N'ha-a-itk's paranormal connection to the elements is perhaps the strongest of any lake monster. Besides a seemingly supernatural control over the lake's waters, it commands aerial forces as well: "the Indians said no boat could possibly land [on Rattlesnake Island], for the monster would cause a strong wind to blow and baffle the attempt. . . . the monster was something more than an amphibian. It was always in some way connected with high winds" (Moon 1977, 32).

What manner of monster is this? The power to summon storms and create whirlpools? Witch curses? (Frankly, not dying in one's own bed doesn't seem like such a terrifying fate.) Such stories and descriptions suggest that N'ha-a-itk is a disincarnate force of nature, not a corporeal creature actually living and eating, breathing and breeding, in the cold waters of Lake Okanagan.

One must be careful about accepting native stories and legends as true accounts of actual creatures. Just because a given culture has a name for (or tells stories about) a strange or mysterious beast—be it Sasquatch or Ogopogo—doesn't necessarily mean that those names or stories reflect reality. Cultures around the globe tell of fantastic beasts and other entities that are important elements of human folklore. I hope that future anthropologists won't look back on our age and believe that these creatures coexisted with us just because we can all name and describe them. (Future mystery mongers might conclude that giant green ogres and talking donkeys existed in our daily lives on the basis of an antique *Shrek* DVD.) This highlights a problem that folklorist Michel Meurger points out in his groundbreaking book *Lake Monster Traditions.* Meurger suggests that claiming native evidence for unknown creatures is an "old gimmick of portraying the sighter as a kind of 'noble savage,'" a process he aptly names "the scientification of folklore" (Meurger and Gagnon 1988, 13).

According to some traditions, Ogopogo's history predates its iden-

tification as N'ha-a-itk. In fact, N'ha-a-itk was actually a murderer named Kel-Oni-Won. According to Dave Parker, a traditional First Nations storyteller, Kel-Oni-Won murdered a vulnerable old man with a club. The gods decided that the killer's punishment "was to change Kel-Oni-Won into a lake serpent, a restless creature who would forever be at the scene of the crime where he would suffer continued remorse. He was left in the custody of the beautiful Indian lake goddess and was known to the tribesmen as N'ha-a-itk; the remorseful one who must live in the lake with the company of other animals. It is said that the only animal who would tolerate his company was the rattlesnake" (quoted in Gaal 2001, 122).

This folkloric motif—an unending punishment for an unforgivable crime—is common in many myths. The later custom of making sacrifices (a warning to heed elders' traditions and rituals) has an analogy in other lake monster mythologies. For example, children living around many reputedly monster-inhabited lakes are told by their parents that if they don't behave and obey, they will be thrown into the lake and the monster will eat them. This "bogeyman" method of social control is a common but largely unrecognized function of lake monster traditions. The origin of N'ha-a-itk and, by extension, Ogopogo is rooted in morality tales, not eyewitness descriptions of real creatures.

Celeste Ganassin, curator of education at the Kelowna Museum, explains that for many early First Nations peoples, the distinction between reality and myth was not particularly important, because the stories hold a culturally specific significance that renders objective truth somewhat arbitrary. Native Indians' stories are not the white man's literal, empirical reality. In the same way that one misses the significance of an urban legend by focusing on whether it corresponds to reality (Ellis 2001, 144), one misses the importance of N'ha-a-itk by treating it as simply Ogopogo or its predecessor. The beliefs and stories serve important functions, Ganassin says, and divorcing the N'ha-a-itk myths from their cultural context strips them of their value. Writers tread shaky ground when they conscript Indian myths of N'ha-a-itk into evidence for present-day Ogopogo's reality. "People pick and choose parts of the First Nations myths to fit their needs, to support whatever argument

they are trying to make. They take what they want and use it to support their ideas" (Ganassin 2005). Almost invariably, it is white writers, not native people, who insist that N'ha-a-itk and Ogopogo are one in the same.

It's not hard to imagine why native groups might create or perpetuate traditions about the lake. The area around Rattlesnake Island can be a cold, desolate, foreboding area. Nearby lies Squally Point, so named for the violent squalls that can quickly arise and menace boaters. As Arlene Gaal (1986, 121) notes about a rocky bluff across from the city of Peachland, "When you look down into the water from there, there's no bottom whatsoever. The water goes out of sight. It looks eerie. Little waves hit the caves along the rocky shore, and they make sucking sounds. The combination of what you see and hear is kind of scary." There are many "cursed" places around the world, where local legend warns off savvy travelers and where monsters are said to dwell. I encountered one such area on the coast of Newfoundland near Bonavista: a huge, dark, unusual sinkhole near a rocky cliff that had washed out two holes toward the ocean. It's known as The Dungeon and is said to be home to sea monsters (figure 7.7)

Ganassin suggests that to really understand N'ha-a-itk you need to examine its social function. "To those people who crossed that body of water, it was a real phenomena. The ritual of honor and sacrifice was tied to sacred practice." Ganassin also points out that Lake Okanagan is hardly unique in its native stories of terrifying creatures inhabiting the depths. "You can't look at a First Nations group anywhere without finding a tradition of some sort of entity in a lake they had to respect or fear. Typically they believed that some sort of spirit inhabits it. Any body of water in First Nations culture can—and often did—generate these stories to explain natural phenomena such as storms, sudden winds, and so on" (Ganassin 2005).

Indeed, the stories of N'ha-a-itk are virtually identical to those told about many other North American lakes, including Ontario and Superior. Meurger, for example, tells of an 1864 account by Indian captive Nicolas Perrot, who reported, "They honoured the Great Tiger as the god of the water. . . . They tell you that the [lake spirit] stays at a very

Figure 7.7 "The Dungeon," said to be the home of sea serpents in northeastern Newfoundland, near Bonavista. (Photo by Benjamin Radford)

deep level, and has a long tail which raises great winds when it moves to go to drink; but if it wags its tail energetically it brings about violent tempests." As at Okanagan, the Indians would make live sacrifices to appease the water spirit. "Before undertaking longer voyages they take care to break the heads of some dogs, which they hang from a tree or a branch" (for a fuller discussion, see Meurger and Gagnon 1988, ch. 3).

If the N'ha-a-itk story is going to be used as supporting evidence for Ogopogo, one has to explain not only what the link is but also why all the other lakes throughout the world with similar traditions have supposed lake monsters that no one has found. (For a parallel example of native stories in the Bigfoot milieu, see anthropologist Wayne Suttles's discussion in Dave Daegling's *Bigfoot Exposed*.)

Though most writers gloss over the tenuousness of the link between N'ha-a-itk stories and Ogopogo, others acknowledge it but claim that ancient Indian petroglyphs, or rock art, depict the lake monster. Costello (1974, 220) writes, "The Indians have left crude drawings on

stone of what is thought to be Naitaka, in which we can see the now familiar long neck, flippers, and even the two 'ears' on the crown of the head." Mackal (1980, 225) states, "There are at least three crude pictographs on rocks around the lake, now in an extremely poor state of preservation, which may be related to an alleged lake monster." Mackal quotes Moon's discussion of a drawing "showing a creature 'stealing' away through the weeds." Consulting the original source, I found that Mackal neglects to mention that Moon (1977) specifically states that this creature was "rodent-like" and therefore less of a fit for N'ha-a-itk than Mackal implies. Mackal suggests that "the relationship is tenuous and can be inferred only from the nature and location of the pictographs themselves." Yet the petroglyphs suggested as Ogopogo depictions are dubious for exactly these reasons. The petroglyph most often cited (figure 7.8) is not from the Okanagan Valley at all but from Sproat Lake on Vancouver Island (Kirk 2005).

Another writer, Karl Shuker, suggests that petroglyphs dating from around 1700 BC might be evidence for lake monsters. One particular drawing, Shuker (1995, 112) writes, "is a strikingly accurate depiction of the vertically undulating, elongate water monsters frequently reported from the lakes and seas of Canada—so much so that it could easily be taken to be a sketch made by one of these beasts' twentieth century eyewitnesses." Yet the petroglyph he describes was found not on the shore of Lake Okanagan—nor even in British Columbia—but instead more than two thousand miles away near Peterborough, just outside of Toronto. It may represent a monster, but its location doesn't suggest Ogopogo. (The assumption that ancient artwork represents reality is what I refer to as the Bangles fallacy, after the 1980s band whose hit song "Walk Like an Egyptian" satirically assumed that real Egyptians walked as they were depicted on tomb walls.)

The criteria for inclusion seem to be so broad that nearly any ancient drawing found anywhere in North America that, to anyone's eyes, might resemble some creature that could live in water can be cited as evidence. Even desert-dwelling Indians (such as the Zuni and Pueblo) depicted horned serpents in their art and pottery. Writes Meurger, "The Zunis of New Mexico have represented their serpent god of under-

Figure 7.8 This Indian petroglyph, claimed to represent Lake Okanagan's Ogopogo, is actually located on Vancouver Island. (Courtesy of Peter von Puttkamer, from his documentary *Monster Hunters*)

ground waters and of torrents, Kolowisi, as a horned reptile with many fins and gaping jaws" (Meurger and Gagnon 1988, 165).

Thus there is little basis for the reputed links between ancient art and modern monsters. "There is no true academic evidence that specifically states that First Nations people ever put down in petroglyphs the shape of N'ha-a-itk," Ganassin (2005) notes. "The pictures didn't come with captions."

OGOPOGO: THE BIOLOGICAL BEAST

N'ha-a-itk is clearly a supernatural entity (one writer calls it "part god, part demon"). Yet Ogopogo, the lake monster we and others searched for in Lake Okanagan, is presumably neither god nor demon; it is a zoological reality. This second incarnation of Ogopogo is crucial to investigators, as it moves the creatures from the mythological realm into the zoological one.

Though the N'ha-a-itk of the Okanagan Valley Indians is long gone, it has been replaced by a decidedly less fearsome—and more biological—beast whose exact form is a matter of opinion and debate. Some writers (e.g., Jerome Clark) claim that the descriptions of Ogopogo are "strikingly similar"; Mackal (1980, 231), after reviewing hundreds of descriptive reports, was "struck by repetitive consistency of the descriptions, almost to the point of boredom." He continues: "The skin is described as dark green to green-black or brown to black and dark brown . . . [or] gray to blue-black or even a golden brown. Most often the skin is smooth with no scales, although the body must possess a few plates, scales, or similar structures observed by close-up viewers. . . . Most of the back is smooth, although a portion is saw-toothed, ragged-edged, or serrated. Sparse hair or hair-bristle structures are reported around the head, and in a few cases a mane or comblike structure has been observed at the back of the neck." The head is said to look like that of a snake, sheep, horse, alligator, or bulldog. Sometimes it has ears or horns; sometimes it doesn't. A surprisingly large number of sightings simply refer to a featureless "log" that came alive, such as in the following descriptions: "They saw what they thought was a log, six feet

long, floating in the water," or, "It was like a great moving log, but alive, moving up and down a little in the water."

This Ogopogo is supported not by Indian myths but by photographs, sonar readings, and eyewitness reports. The Folden film (discussed by Joe earlier in this chapter and analyzed in appendix 4) is considered among the best evidence. For such cryptozoologists as John Kirk of the British Columbia Scientific Cryptozoology Club, Ogopogo is the most likely and best documented of the lake monsters, far more so than Loch Ness's denizen. Loch Ness is a high-profile money pit, swallowing hundreds of thousands of research dollars and countless hours of effort over the last three-quarters of a century, yet yielding precious little in return. According to Kirk (2005), "The Ogopogo phenomenon preceded that of the Loch Ness mystery. In the 1920s Ogopogo appearances were commonplace and the animal was regarded as just another member of the local fauna and not a mystery. Its reality was so strong to Okanagan Lake residents that when they built ferries to take people form Kelowna to Westbank there was concern that the ferry needed to be armed with 'monster-repelling devices' to ensure passenger and crew safety." Furthermore, Kirk says, "The catalog of films and video of Ogopogo are more numerous and of better quality than anything I have personally seen at Loch Ness and I believe that several of them are very persuasive that there is a large living unknown creature inhabiting the lake." Jerome Clark and Nancy Pear, in their book *Strange and Unexplained Happenings* (1995, 440), also suggest that "despite its silly name, Ogopogo is one of the most credible of the world's lake monsters."

OGIE: THE LOVABLE MASCOT

A third Ogopogo exists: the local mascot and hero, a cuddly bringer of cheer and love. Long gone are the echoes of live sacrifices, drowning deaths, and bone-strewn beaches. This is N'ha-a-itk and Ogopogo updated for modern Canada and presented by a savvy public-relations department. Nicknamed Ogie, this Ogopogo is sometimes dragonlike, complete with wings and scales and an elongated body formed into the distinctive series of humps. Countless tourist items feature Ogie, in-

Figure 7.9 A statue of Ogopogo, the beloved local lake monster, sits in downtown Kelowna, British Columbia. (Photo by Benjamin Radford)

cluding T-shirts, coffee mugs, key chains, and bumper stickers. Downtown Kelowna sports a life-size (?) Ogopogo statue near the waterfront (figure 7.9), and a half dozen books on the beast can be found in bookstores around town. The city of Kelowna's coat of arms, adopted in 1955, even features a seahorse, which, according to a city brochure, "in heraldry is the closest approximation of our Ogopogo."

The public-friendly Ogopogo can be found peering down from shelves in tourist hovels, next to snow globes and plush beavers in little red Mounties uniforms adorned with maple leaves. This Ogopogo is devoid of nasty scales or slimy skin, sheathed instead in a fuzzy body and lovable countenance (figure 7.10). Ogie is cute and green, often childish, and frequently sports eyelashes and a disarming smile.

A 1982 children's book by Brock Tully is typical of the scrubbed-up, reformed beast. In the book *With Hope We Can All Find Ogopogo,* a "chubby, fuzzy, cuddly little ball of fluff with a big, warm and excited smile" named Hope becomes dismayed at the complex, alienating, and confusing world of adults. Seeking solace, he wanders to the

Figure 7.10 Cuddly and plush Ogopogo dolls are a far cry from the creature's legendary and bloody past. (Photo by Benjamin Radford)

shore of Lake Okanagan, where he suddenly "saw two of the biggest, warmest, lovingest eyes he had ever seen and he felt reassured. He was further soothed when the monster belonging to the eyes spoke so gently and softly and welcomed Hope to the cove." Hope and Ogopogo develop a deep friendship: "Ogy was the most loving, forgiving, and patient living creature possible. Ogy *was* love!!" The story ends with Hope running back to his home yelling, "We are all Ogopogo!" It is *this* Ogopogo—not the murderous and fearsome N'ha-a-itk, not the dark and blobby images in home videos and photographs—that is love incarnate. In fact, there may be more children's books about Ogopogo than about any other lake monster. Other titles include *Ogopogo: The Misunderstood Lake Monster* by Don Levers (in which the beast heroically saves several busloads of schoolchildren from drowning) and *The Legend of L'il Ogie* by Garfield Fromm.

RECONCILING THE OGOPOGOS

Ogopogo means different things to different people. This does not automatically relegate the beast to myth, of course: Hindus imbue cows with a significance that eludes McDonald's customers, and any cat fancier will affirm that felines are exalted among animals. But the differing versions do suggest that a real understanding of Ogopogo requires a broad view.

"Ogopogo has mellowed with the passing of time," writes Gaal in her book *In Search of Ogopogo* (2001, 120). "Of recent years, he frolics in the water with almost impish delight, flips a flirtatious tail, and, with a sly wink, disappears into the froth to return from whence he came." This mellowing occurred rather suddenly in the 1920s. In 1924, songwriter Cumberland Clark wrote a popular music-hall song called "The Ogopogo: The Funny Fox-Trot" (Shuker 1995). As Joe mentioned earlier, the song (which whimsically claimed that Ogopogo was the result of an illicit union between an earwig and a whale) established the name of the creature. Shortly thereafter, Ogopogo sightings increased dramatically. Note that this increase in sightings was linked to *publicity,* not to other sightings. Unless the creature frequented music halls, it wouldn't have known that its fame was being spread far and wide and thus be inclined to show itself more often. The most likely explanation for the increased sightings is that people were more aware of the creature, were expecting to see it, and were interpreting ambiguous lake phenomena as Ogopogo even in the monster's absence. A similar spike occurred at Lake Champlain following the 1981 publication of Sandra Mansi's 1977 photo of Champ (see chapter 2). But, notes Blackman (1998, 71), "reported Ogopogo attacks had ceased completely, and the peoples living on the lake were beginning to view the monster in a much kinder light. As fear gave way to curiosity and excitement, accounts of encounters with 'the lake demon' became much more lighthearted."

Unless lake pollution over the past centuries has had a sedative effect on the beast, this marked change in its behavior is very curious. Animals don't exhibit such a temperamental about-face in the real world. It seems that the public's perception of Ogopogo—independent

of its actions—influenced reports of the monster's behavior. Part of this transformation is surely an effort to capitalize on tourism: who wants to travel to western Canada to vacation where a murderous leviathan may demand a blood tithe or the family puppy?

As with N'ha-a-itk, the real question is not what Ogopogo means in some absolute or biological sense but what Ogopogo means to the culture and the age embracing it. The First Nations peoples have N'ha-a-itk, the cryptozoologists and eyewitnesses have Ogopogo, and the tourists and Okanagan Valley children have Ogie. N'ha-a-itk and Ogopogo are fundamentally amorphous, but with Ogie, we have finally have captured the beast—in its cultural, if not its actual, form. The creature's fame began with stories and songs of its exploits; years later, those stories crystallized into (and influenced) modern reports of an actual beast; soon after that, stories and songs about the creature began to spread once again. Until and unless the beast is captured or identified, Ogopogo will surely live on: part god, part demon, and part chameleon.

REFERENCES

Blackman, W. Haden. 1998. *The field guide to North American monsters.* New York: Random House.

Bondura, Darryl. 2005. Interview by Joe Nickell, February 5.

Brimblecombe, W. H. 1930. *Ogopogo.* The Fourth Annual Report of the Okanagan Historical and Natural History Society, September 9. Reprinted May 1975, 28–29.

Bull, John, and John Ferrand Jr. 1994. *National Audubon Society guide to North American birds: Eastern region,* rev. ed. New York: Alfred A. Knopf.

Clark, Jerome, and Nancy Pear. 1995. *Strange and unexplained happenings: When nature breaks the rules of science*. Detroit, Mich.: Gale Research.

Collier's Encyclopedia. 1993. S.v. "Otter," 18:248.

Costello, Peter. 1974. *In search of lake monsters.* New York: Coward, McCann, and Geoghan.

Daegling, David. 2004. *Bigfoot exposed.* New York: Altamira Press.

DeMara, Paul. 2004. Personal correspondence, December 15.

Ellis, Bill. 2001. *Aliens, ghosts, and cults: Legends we live*. Jackson: University Press of Mississippi.

Fredricks, Grant. 2005. Quoted in Lake Monsters. Is It Real? series. National Geographic Television, August 20.

Fromm, G. S. 1991. *The legend of L'il Ogie.* Penticton, B.C.: Sea Plush Industries.
Gaal, Arlene. 1986. *Ogopogo: The true story of the Okanagan Lake million dollar monster.* Surrey, B.C.: Hancock House.
———. 2001. *In search of Ogopogo: Sacred creature of the Okanagan waters.* Surrey, B.C. Hancock House.
———. 2005a. Interview by Joe Nickell, February 4.
———. 2005b. Personal correspondence with Benjamin Radford, January 24.
Ganassin, Celeste. 2005. Interview by Benjamin Radford, February 4.
Gould, Rupert T. 1976. *The Loch Ness monster.* Secaucus, N.J.: Citadel Press.
Kirk, John. 1998. *In the domain of the lake monsters*. Toronto: Key Porter Books.
———. 2005. Interview by Benjamin Radford, February 4 and 5.
Levers, Don. 1985. *Ogopogo: The misunderstood lake monster*. Kelowna, B.C.: Sandhill Publishing.
Mackal, Roy P. 1980. *Searching for hidden animals*. London: Cadogan Books.
Meurger, Michel, and Claude Gagnon. 1988. *Lake monster traditions: A cross-cultural analysis.* London: Fortean Tomes.
Moon, Mary. 1977. *Ogopogo.* North Vancouver, B.C.: J. J. Douglas.
Okanagan Lake. 2005a. www.sellingkelowna.com/kelowna_info/okanaganlake.htm (accessed January 21).
———. 2005b. www.bcadventure.com/adventure/explore/ok/mabel/okanagan.htm (accessed January 21).
Roed, Murray A. 2005. Geologic history of Okanagan Valley and origin of Lake Okanagan, British Columbia. www.geoscapes.ca/pov/okhistory5.html (accessed February 21).
Shuker, Karl. 1995. *In search of prehistoric survivors.* London: Blandford Books.
Tully, Brock. 1982. *With Hope we can all find Ogopogo.* Vancouver, B.C.: Intermedia Press.
Whitaker, John O. Jr. 1996. *National Audubon Society field guide to North American mammals.* New York: Alfred A. Knopf.

8

Other Notable Lake Monsters

So far in this book we've examined some of the world's greatest and best-known lake monster mysteries. And although Nessie, Champ, Memphre, Cressie, Ogopogo, and the rest get much of the attention, their lesser-known cousins are said to populate countless lakes around the globe. What follows is a brief survey of the world's other lake monster mysteries.

NORTH AMERICA

Canada's Lake Utopia, in southern New Brunswick, is reportedly home to a fearsome monster, according to Micmac Indian legend, century-old tales, and modern eyewitness reports. As with other lake creatures, it is variously described but only rarely glimpsed; its presence is more often demonstrated by a churning of the water and debris sent up from the depths. There are no known photographs of the alleged creature, but in the early settlement period, tracks—or rather a "slimy trail" with claw marks—leading into the water were reported (Martinez 1988; Colombo 1988). Today, it appears that most local people are skeptical of the monster's existence, although a few have reported seeing an unexplained wake (Murray 1999) or what they believed was a large animal (Gaudet 1999); others know someone who has witnessed such a sighting (K. Wilson 1999; T. Wilson 1999).

On June 27, 1999, Joe visited nearby St. George and collected local accounts of the fabled monster. His guide, Tony Wilson of All Wet Aquatics, took him on a jet-ski trip (via the Magaguadavic River and a natural canal) into and around the 3,409-acre lake. Despite these efforts, the creature didn't have the courtesy to show itself, let alone pose for a photograph.

As with similar claims, a major argument against the possibility of such a monster is the improbability of the lake providing sufficient food not merely for one leviathan but for the breeding herd that would be necessary for the continuation of the species. Also, many mundane phenomena can simulate a monster. Local candidates include floating logs; wind slicks; salmon, sturgeon (Gaudet 1999), and schools of smaller fish; and silver eels, which were once so plentiful that they clogged the pulp mill's waterwheels (*Brief history* n.d., 13). Other potential culprits include swimming deer, muskrats, beavers, and otters (St. George 1999)—especially otters, which could have produced many of the effects reported (Nickell 1995, 1999).

Another reputed New Brunswick lake monster is the giant amphibian now displayed at the York Sunbury Historical Society Museum in Fredericton (figure 8.1). Dating to the 1880s, the huge bullfrog reportedly lived in Killarney Lake, some eight miles from Fredericton, where Fred B. Coleman operated a lodge. Coleman claimed that he had made a pet of the great croaker and that his guests fed it June bugs, whiskey, and buttermilk. It thus grew to a whopping forty-two pounds and was used to tow canoes and race against tomcats. It was killed, Coleman said, when poachers dynamited the lake to harvest fish, whereupon the distraught raconteur had it stuffed and placed on display in the lobby of his hotel. His son's widow donated it to the museum in 1959 (Coleman n.d.).

Some local doubters insist that Coleman simply bought a display item that had been used to advertise a cough medicine guaranteed to relieve "the frog in your throat" (Phillips 1982). A former historical society president called it a "patent fake" and said that it should have been thrown out years ago; other officials coyly declined suggestions that it be examined scientifically (Colombo 1988, 50–51; Coleman n.d.). *Ma-*

Figure 8.1 The Coleman frog. Since the 1880s, folks have debated which is the bigger whopper: this giant amphibian or the claim that it's authentic. (Photo by Joe Nickell)

clean's magazine concluded: "The argument about whether it is a stuffed frog or an imitation may never be settled, but as a topic of conversation and a tourist curiosity it has had as long a career as any frog, dead or alive" (McKinney n.d.).

Following Joe's expedition to the museum's third floor, he determined that the exhibit was probably not a real bullfrog *(Rana catesbeiana).* Did he penetrate the sealed display case to obtain a DNA sample? No, he simply sweet-talked his way into the museum's files, which were revealing. A 1988 condition report by the Canadian Conservation Institute referred to the sixty-eight-centimeter (almost twenty-seven-inch) artifact as a "large, possibly stuffed frog" but went on to observe that—in addition to many wrinkles having formed in the "skin"—there

was actually a "fabric impression underneath" and, indeed, "a yellowed canvas" visible through some cracks. There was an overall layer of dark green paint, to which had been added other colors, the report noted. Wax appeared to be "present below the paint layer," and the feet were described as being "a translucent colour, possibly consisting in part of wax." Although a taxidermist of the 1880s might have used some of these materials (*Encyclopaedia Britannica* 1960), the overall effect is of a fabricated item, especially considering the canvas. Its impression showing through the paint suggests the lack of an intervening layer of true skin, for which the fabric was probably used as a substitute.

It should be noted that the largest frog actually known, according to *The Guinness Book of Records* (1999), is the African goliath frog *(Conraua goliath),* a record specimen of which measured a comparatively small fourteen inches (sitting) and weighed just eight pounds, one ounce. At almost twice the length and five times the weight, Coleman's pet froggie is no more credible than his outrageous yarns about the creature.

The museum file also contained a letter stating the policy of the historical society regarding the Coleman frog. To a man who had objected to the exhibition of the artifact, President E. W. Sansom (1961) wrote: "It was agreed . . . that the stuffed frog was of historical interest only as an artificial duplication used for publicity purposes by F. B. Coleman years ago in Fredericton. As such, the majority of those present felt the frog should be retained but only as an amusing example of a colossal fake and deception." And so it remains on display, according to one journalist (Brewer 1973), "as big as life—yea, bigger."

Canada's Lake Simcoe, some forty miles north of Toronto, supposedly holds a monster known as "Igopogo" (after its more famous relative Ogopogo), among other names. Residents of Beaverton, on the eastern shore, call it "Beaverton Bessie," while others refer to it as "Kempenfelt Kelly," after Kempenfelt Bay, which has the lake's deepest water and claims the most sightings. Sources refer vaguely to early Indian legends of the monster and sporadic reports of a "sea serpent" in the lake during the nineteenth century. Important sightings occurred in 1952 and 1963 (Costello 1974, 229), and a "sonar sounding of a large animal" in 1983 was followed by a videotape in 1991 of "a large, seal-like

animal" (Eberhart 2002, 242–45). Significantly, according to John Robert Colombo in his *Mysterious Canada* (1988, 153), "No two descriptions of Kempenfelt Kelly coincide." Nevertheless, cryptozoologist George M. Eberhart (2002, 244) attempted a portrait:

> Physical Description: Seal-like animal. Length, 12–70 feet. Charcoal-gray color. Dog- or horse-like face. Prominent eyes. Gaping mouth. Neck is like a stovepipe. Several dorsal fins. Fishlike tail.
>
> Behavior: Basks in the sun.

In August 2005, supported by Discovery Canada's TV program *Daily Planet* and by the tourism department of the city of Barrie, we went in search of the elusive creature, conducting interviews and searching Kempenfelt Bay using a boat equipped with sonar and an underwater camera. Our first stop, however, was the home of local retired businessman Arch Brown, who told us that he had coined the name Kempenfelt Kelly and had seen the legendary monster himself. He acknowledged that his background made him predisposed to believe in the beast; his Scottish father had told him of the Loch Ness monster, and Brown had once resided in British Columbia, so he was familiar with Okanagan's Ogopogo. When he moved to Barrie many years ago, he said, he was prompted by local reports to be "on the lookout" for the monster, spending many hours at the task. Over the years, he has had no fewer than four sightings—all from a distance, unfortunately. Once he saw the creature from an estimated quarter of a mile away but nevertheless described it as being ten feet long and having a dark gray, serpentlike body and a doglike head. It swam, he told us, with an undulating, up-and-down motion. Less seriously, he added that it had "an impish look" and a kind disposition that kept it from frightening children (Brown 2005).

Like many of the other sightings, Brown's could reasonably be explained by otters swimming in a line, diving, and resurfacing. Our boat captain, Jerry Clayton (2005), specifically mentioned otters as a likely explanation for some sightings. Brown (2005) himself acknowledged

that there are otters—as well as beavers, minks, and other animals—in the vicinity, although he did not believe that any of these were responsible for his sightings.

As to the 1983 sonar report, Clayton showed us on his sonar screen what were clearly individual fish, as well as occasional larger forms that he attributed to schools of small fish being "read" by the sonar as a single unit. The underwater camera showed only nonmonstrous fish. Clayton (2005) told us that he had been on Lake Simcoe for eighteen years. "I've dragged a lot of line for a lot of miles here on this lake, and—nothing," he said.

Elsewhere in Canada, Quebec is apparently a hotbed of lake monsters. French researcher Michel Meurger found well over fifty lakes in the province said to have some monster or another. In addition to Lake Champlain and Lake Memphremagog (discussed in chapters 2 and 3, respectively) those lakes that connect to the St. Lawrence Seaway include Massawippi, Aylmer, St. Francois, Williams, and Trois-Lacs. What struck Meurger (1986) most about the results of his investigation was the widely varying descriptions: "Refreshingly, some witnesses spoke of animals possessing hair and scales at the same time! . . . Because the descriptions in the reports vary so much, it is impossible to make any definite identifications."

In the United States, Lake Tahoe's "Tessie," a humped dark or brown form between twelve and twenty-five feet long, had a heyday of sightings in the mid-1980s. In 1984, an organized but fruitless search was conducted for the monster. Investigators speculated that some of the sightings may have been of a giant sturgeon. A popular recreational area, Lake Tahoe continues to report occasional sightings.

The Great Lakes are said to harbor a few monster mysteries as well. The creature in Lake Erie, known as "South Bay Bessie" (a.k.a. "Lake Erie Larry"), has been described as a giant snake. Like most monster descriptions, those of Bessie vary widely; the skin has been characterized as black, brown, or copper, as either smooth or with silver-dollar-size snakelike scales. Many of the sightings date back to the 1800s, when interest in the monster was high and fueled by outlandish (and almost certainly hoaxed) newspaper stories. One article, published in the *Pult-*

neyville (N.Y.) Commercial Press in 1867, states that a local "sea serpent" was in fact owned by a local fellow: "Mr. Henry Stowell, of Oswego, says he owns the animal of which so much has been said, having imported him at great expense from the Humbug (!) Islands. . . . [Stowell] has him boarded during the hot weather, and as soon as the weather becomes cool he intends to skin him and have it stuffed. . . . [The monster] has occasionally stolen away and visited different localities about the lake, and when he has been seen, has made hideous noises in imitation of the parties present" (quoted in Palmer 2001.) Only a few modern reports exist, mostly in the 1980s and 1990s. Lakes Ontario, Superior, and Onondaga also have resident lake monster mysteries.

EUROPE

Lake Seljordsvatnet in Norway supposedly contains an unknown creature in its depths called "Selma." Sightings go back hundreds of years, although it seems that Selma's heyday was in the 1960s and 1970s, when there was a handful of accounts. Most reports claim that the creature has one to five humps and an equine head. The best-known effort to find the monster was a 1998 expedition led by UFOlogist Jan-Ove Sundberg and featured in a Discovery Channel documentary. Though a fairly well-equipped and well-funded effort, the search turned up no monster and no real evidence, but it generated some controversy. Several members of the team resigned, believing that Sundberg was too quick to tout ambiguous evidence and apparently more interested in profit than in truth. One team member, Kurt Burchfiel, complained, "As soon as there's any sort of big blip on the echosounder Jan is parading around with it and insisting that it's evidence." Burchfiel resigned, telling Sundberg, "I have very different goals in this. I came here genuinely interested in pursuing this in an intelligent and educated way. . . . It strikes me that you're here more for the money and for the publicity and the hype" (for more, see Walsh 1999, 48).

Not far away, a "snakelike animal with a dog's head and fins," named "Storsjoe," lives in Sweden's fifth-largest lake, Storsjoen. Like a few other lake monsters, Storsjoe is a protected species; a 1986 court

ruling declared it illegal to "kill, hunt, or catch" the creature, as well as "to take away or hurt the monster's eggs, roe, or den." In 2004, local resident Magnus Cedergren planned to hatch the eggs, raise monster babies, and turn them into a tourist attraction. The intrepid entrepreneur may have counted his eggs before they hatched, however, because he was denied permission by the provincial government to even search for the monster's eggs. Sightings allegedly date back to 1635, and since then, around five hundred people have seen the beast.

"Teggie" is the celebrated denizen of the deep in tiny Lake Bala, North Wales. Recorded sightings of the creature date back only to about 1975, when former lake warden Dafydd Bowen saw an unusual form in the water: "It was grey, about eight feet long, and looked like a crocodile with a small hump." In March 1995, two fishermen reported seeing a creature raise its fearsome head ten feet above the lake's surface; two years later, a man filmed some video footage of what appears to be a moving head and hump.

Ireland's Lough Ree monster, ten to thirty feet long with a large, horselike head, has been sighted occasionally in the small lake. One of the most prominent sightings occurred in 1960, when three priests claimed to have seen a snakelike creature swimming near their boat, its eyes, long nose, and ears rising out of the water.

Scotland is riddled with lochs, and Loch Ness isn't the only body of water boasting beastie sightings. Loch Morar, on the west coast, is also the site of some monster mysteries, with some sources dating the first sighting to 1887 or 1895. In 1996 a diver on an expedition to the bottom of the loch found six large bones sixty feet under the surface. This finding generated speculation that the remains were of the "Morag" creature, but the bones were later identified as belonging to deer.

Ulrich Magin, a German investigator, examined reports from continental Europe, although most of his findings are in rivers and are not, strictly speaking, lake monsters. He does mention the 1982 sighting in Poland's Lake Zeegrzynski of a twenty-foot beast sporting a "slimy black head, with rabbit-like ears." In a 1986 article in the magazine *Fortean Times,* he discusses a monster mystery in Switzerland's Urner Lake. On August 25, 1976, a group of about sixty people near the resort town

of Brunnen saw a monster twenty to twenty-five feet long surface three times. The long-necked beast, described as looking like a dragon, was quickly dubbed "Urnie." A German photographer snapped a photo, and the sighting was reported by newspapers worldwide. A week later, Urnie was revealed as a hoax: it was a constructed model created for a Swiss television program and had actually been in the lake for a week before being noticed.

SOUTH AMERICA

Argentina's Nahuel Huapi is reportedly home to a giant creature described as thirty-three feet long, multihumped, and green. The beast, called "Nahuelito," has at times been supposed to be a plesiosaur (as have Champ, Nessie, and others) or, oddly enough, possibly even a pterodactyl. One investigator suggested that some of the sightings might actually be of a large duck native to the area. These ducks have a reptilian appearance, and a photograph of one looks "for all the world like a submerged monster hump throwing up fountains of spray" (Magin 1996, 28).

ASIA

Turkey's Lake Van is supposedly home to a slimy, black, fifty-foot horned beast. Reports date back only to 1995, and in 1997, a man claimed to have captured "Vanna" on videotape.

"Wenbo," a lake creature in Tibet, was seen most notably in 1980. It is one of only a handful of lake monsters blamed for murder, reportedly responsible for the disappearance of a missing villager and a yak.

A so-called Chinese Nessie is said to exist in northeastern China's Tianchi Lake. In 2002 hundreds of tourists reported a horse-headed object with a black body in the water about thirty feet from shore. One witness said that the creature looked just like the model on display at a nearby tourist museum.

"Issie," of Lake Ikedo-ko in Kagoshima, is one of Japan's best-known lake monsters. It is black, possibly striped, and sixteen to ninety

feet long with two humps. Issie was first photographed in 1978; in 1998 a long, dark object was videotaped in the lake.

THE PACIFIC

Belief in the "Migo" monster of Lake Dakatua on New Britain, an island off the coast of Papua New Guinea, was boosted in early 1994 when a Japanese television crew visited the lake in search of the creature. The team interviewed eyewitnesses, dispatched divers, and employed video and sonar equipment. These efforts paid off when videotape captured an unknown creature (or creatures) displaying unusual movements and characteristics. Several video clips were analyzed by such researchers as Karl Shuker, Darren Naish, and Ben Roesch, and despite early pronouncements that seemed to confirm a mystery creature, the scenes were later determined to be of known animals: dolphins in one case, and mating crocodiles in another.

AFRICA

Several of Africa's many lakes are said to contain fearsome and unknown creatures, including Lake Victoria. "Lukwata," as the monster is sometimes called, is twenty to thirty feet long with dark, smooth skin and a distinctively round head. Lukwata is reportedly unusually aggressive (for a lake monster, anyway) and has been known to attack fishermen and boats. Other lakes in Ethiopia and Chad have their own beast, "Auli," which is said to be sheep sized; researchers suspect that a manatee might account for some of the sightings. The mokele-mbembe is a dinosaurian monster with elephantine feet and a long, snakelike head said to inhabit some of Africa's remotest areas, especially the lakes and rivers in Cameroon and Congo. Stories have circulated that pygmies at Lake Tele killed and ate one of the creatures—a fatal mistake, since the flesh is terribly toxic. Thus, sadly (and conveniently), no eyewitnesses live to tell the tale.

REFERENCES

Brewer, Jacqueline. 1973. Famous Fredericton frog dates back to city's founding. *Daily Gleaner* (Fredericton, N.B.), March 30.

Brief history of the Magaguadavic. N.d. [St. George, N.B.]: Magaguadavic Watershed Management Association.

Brown, Arch. 2005. Interview by Joe Nickell.

Clayton, Jerry. 2005. Interview by Benjamin Radford.

Coleman frog. N.d. Vertical files, York Sunbury Historical Society Museum and Fredericton Public Library.

Colombo, John Robert. 1988. *Mysterious Canada: Strange sights, extraordinary events, and peculiar places.* Toronto: Doubleday Canada.

Costello, Peter. 1974. *In search of lake monsters.* New York: Coward, McCann, and Geoghegan.

Eberhart, George. 2002. *Mysterious creatures: A guide to cryptozoology.* Santa Barbara, Calif.: ABC-CLIO.

Encyclopaedia Britannica. 1960. S.v. "Taxidermy."

Gaudet, Sam. 1999. Interview by Joe Nickell, June 27.

The Guinness book of records. 1999. N.p.: Guinness Publishing, 122.

Magin, Ulrich. 1986. A brief survey of lake monsters of continental Europe. *Fortean Times* 46 (spring): 53.

———. 1996. Duck! It's a plesiosaur. *Fortean Times* 92 (November): 28.

Martinez, Lionel. 1988. *Great unsolved mysteries of North America.* Secaucus, N.J.: Chartwell Books, 6–7, 12.

McKinney, Mary. N.d. Canadianecdote. Clipping from *Maclean's.* In vertical files, York Sunbury Historical Society Museum and Fredericton Public Library.

Meurger, Michel. 1986. The jabberwocks of Quebec. *Fortean Times* 46 (spring): 41.

Murray, Jan. 1999. Interview by Joe Nickell, June 27.

Nickell, Joe. 1995. *Entities: Angels, spirits, demons, and other alien beings.* Amherst, N.Y.: Prometheus Books, 241–43.

——. 1999. The Silver Lake serpent. *Skeptical Inquirer* 23, no. 2 (March–April): 18–21.

Palmer, Richard. 2001. Did sea serpents once inhabit the Great Lakes? *Crooked Lake Review* 120 (summer).

Phillips, Fred H. 1982. Coleman frog a fake? *Daily Gleaner* (Fredericton, N.B.), April 22.

St. George, New Brunswick, the granite town. 1999. Brochure published by town of St. George.

Sansom, E. W. 1961. Letter to J. Winslow, November 20. In vertical files, York Sunbury Historical Society Museum and Fredericton Public Library.

Walsh, Dave. 1999. A monstrous farce. *Fortean Times* 117 (December): 48.

Wilson, Kelly. 1999. Interview by Joe Nickell, June 27.

Wilson, Tony. 1999. Interview by Joe Nickell, June 27.

This page intentionally left blank

Conclusion

As our investigations have made clear, the existence of lake monsters is doubtful, for a variety of reasons. We often speak of Nessie, Ogopogo, Champ, and other lake monsters as single creatures, but for some hitherto unknown species to reproduce, there must be a sizable breeding herd. This means that each lake should hold not one but perhaps a dozen or more creatures—presumably making a verifiable encounter more than ten times more likely than if there were just one individual. Loch Ness, for example, is a little more than twenty miles long; how can a dozen giant creatures share the same lake and somehow escape decades of extensive sonar searches? A floating or beached carcass should eventually be encountered; none has. Clear and convincing photos or video should exist; none do. Sightings, legends, and ambiguous photos only serve to whet the investigator's appetite for the main meal, the real proof—which never comes.

Hundreds or even thousands of lakes have been reported to hold monsters at one time or another. Even if only a small number actually do, that is still hundreds of mysterious creatures somehow managing to avoid leaving a shred of hard scientific evidence of their existence. It also seems unlikely that there would be some multimillion-year-old creature—such as the plesiosaur—in lakes that, like America's Lake Champlain, are only about ten thousand years old.

Often, the "lake monster" label is simply a catchall term for "something strange" in the water. Although many sane and sincere people report seeing lake leviathans, in all likelihood they are encountering something that they misperceive as such. We have given many exam-

ples in this book, including otters, eels, logs, and beavers. These eyewitnesses are not foolish; they are subject to the same psychological and perceptual errors that plague all of us from time to time. And of course, there will always be a few cranks, wags, and hoaxers who muddy the truth about lake monsters.

The lure of the unexplained is powerful, especially in a shrinking world where so many life-forms have gone extinct. Like Bigfoot, lake monsters—if they exist—could provide a tangible link with the remote past, just as extraterrestrials may provide a connection with the future. For some people, apparently, imaginary creatures are better than none at all.

This wishful thinking helps explain certain cultural aspects of the lake monster phenomenon that we observed. For instance, Ben calls attention to the many similarities between two relatively nearby lakes, Lake Champlain and Lake Memphremagog, that we investigated. The two mysteries developed "almost in parallel," he points out, with both dating back a century or more. Moreover, at each lake the respective monster's description evolved with the changing public concept of what such creatures should look like: the "sea serpent" model morphing into the more "scientific" one of a prehistoric aquatic creature (as I discussed in chapter 2).

In part because of Lake Champlain's larger size and greater accessibility, "Memphre is a poorer cousin to the more famous Champ," Ben says—a "Champ Lite," so to speak. He notes that after Sandra Mansi published her famous photo of Champ, there was an upsurge in sightings on Lake Champlain, with some interest spilling over to Lake Memphremagog. Just two years later, Barbara Malloy—like Mansi, a middle-aged Vermont woman—would make her first sighting of Memphre. Lake monster sightings almost invariably correspond with the public's interest in the creatures, suggesting a social and cultural engine (not necessarily a group of unknown beasts) behind the reports.

The idea of lake monsters has become so prevalent that they are even "seen" where they are most unlikely to exist, as is the case with at least two lakes from my native Kentucky. Cryptozoologist Roy P. Mackal's *Searching for Hidden Animals* (1980, 220) mentions Her-

rington Lake and Kentucky Lake as the subjects of monster reports that may be worthy of investigation. And George Eberhart's *Mysterious Creatures: A Guide to Cryptozoology* (2002, 682) specifically cites a fifteen-foot "prehistoric creature" that was reportedly seen several times in Herrington Lake in 1972. The problem with these reports is that both lakes are *man made*! According to *The Kentucky Encyclopedia* (Kleber 1992, 532), Herrington Lake was formed in 1925 and Kentucky Lake in 1944. How—monster promoters should be asked—can lakes of such recent vintage and construction be populated with prehistoric or exotic animals? It seems that a romantic belief in monsters may be resistant to evidence. Such is the lure of lake monster mysteries. We too have heard its siren call.

REFERENCES

Eberhart, George. 2002. *Mysterious creatures: A guide to cryptozoology.* Santa Barbara, Calif.: ABC-CLIO.

Kleber, John. 1992. *The Kentucky encyclopedia.* Lexington: University Press of Kentucky.

Mackal, Roy P. 1980. *Searching for hidden animals.* New York: Doubleday.

This page intentionally left blank

Appendix 1

Mysteries and Misinformation: How Cryptozoologists Created a Monster

Sifting through information on lake monsters is made somewhat difficult by sloppy scholarship. Many writers get details wrong, and reports are often contradictory. I encountered this most notably in my research of the Lake Champlain mystery. By far the most common misconception about Champ is that the creature was sighted by the person it was (indirectly) named for: explorer Samuel de Champlain.

As is often the case, consulting original sources shed light on the mystery. Michel Meurger devotes an appendix in *Lake Monster Traditions* to reprinting the full, original account and sets the record straight: "Under the magic wand of sensationalism, the simple note of an inexperienced naturalist becomes 'rare testimony,' and the explorer becomes godfather to a monster he never saw!" (Meurger and Gagnon 1988, 270). Whether due to ignorance, poor scholarship, or mystery mongering, this misunderstanding is pervasive in the Champ literature, repeated by everyone from Joe Zarzynski to Dennis Hall to the Champ sighting signboard in Port Henry to a 1998 *Discover* magazine article to Sandra Mansi herself.

Nature doesn't interpret itself; that task is left to investigators and scientists. Data and information are simply sterile observations and quantifications until they are given meaning and context by those examining the phenomena. In cryptozoology, because the evidence is

often ambiguous (photographs, footprints, sighting reports), it's especially important to let the evidence speak for itself and not read too much into it. Conjecture and assumptions are fine, but they should be firmly grounded and not simply based on other unconfirmed assumptions and conjecture. To do otherwise risks building an argument on a house of cards.

When interviewing eyewitness Sandra Mansi at length about her sighting and photograph, I was particularly intrigued by her description of the process by which she came to the conclusion that what she saw was the reputed monster Champ. After all, the famous photograph she took is not obviously Champlain's lake denizen. It might be, but as J. Richard Greenwell has noted, it isn't necessarily a lake creature, or even a living object.

Some accounts of Mansi's encounter suggest that she saw the lake monster, identified it as Champ, and took a photo of it. But according to Mansi, that's not what happened. Part of the problem with this description is that it starts with the answer; the assumption is made that what she saw and photographed was a lake creature. But another, more accurate (and scientific) approach is to stick to the facts and simply report that she saw and photographed an unknown object that was later thought (by others) to be Champ. Some may argue that this is an irrelevant detail, but I disagree; reporting that Mansi saw and photographed Champ grossly oversimplifies what happened, and, as is often the case in investigations, the devil is in the details. The fact is that the best eyewitness to a lake monster didn't identify it as such until cryptozoologists convinced her that that's what it was.

The details of Sandra Mansi's encounter with Champ are related in chapter 2. But her progression from eyewitness to Champ advocate is interesting and instructive. She went through three distinct stages of belief about what she had seen:

1. At time of the sighting, Mansi wasn't sure what she was seeing. She thought that it might be an optical illusion, but not the Lake Champlain monster. She was duly skeptical at first, well aware that perceptions can be deceiving and that the light, water, and lack of

contextual cues can be misleading. (Mansi said, "I thought it was maybe the sun. . . . The lake can do funny things—it really can.") It could have been, she says, a trick of the light or a large fish. As for the local lake monster, although Mansi had heard stories of Champ as a girl, she didn't take them seriously; Champ was the creature that would eat little children if they didn't behave. Before this, Mansi thought of Champ "kind of like the Tooth Fairy," she says. "Champ came into my mind, but I totally dismissed it . . . we convinced ourselves it was probably a fish or whatever and we sent it to the Photomat."

2. When the photograph was developed and she saw the image on the print, Mansi was certain that it wasn't an optical trick but some physical object (not necessarily Champ) actually in the water. She now considered the possibility that what she had seen was Champ, but she wasn't certain. Even several years after the sighting, Mansi hadn't conclusively settled on Champ as the definitive explanation. (When Mansi offered the photo to an expert for analysis in 1980 or 1981, she told him, "I'd like for you to look at it and tell me what the hell I saw—because I don't know.")
3. Mansi didn't identify the object as a lake creature until cryptozoologists convinced her that that's what it was. In 1979 Mansi and a friend brought the photo to the attention of Champ researcher Joe Zarzynski, who had been searching for the creature for years and was convinced of its existence. Other cryptozoologists, including Roy Mackal and Richard Greenwell, were eventually contacted as well. Mansi soon became a true believer: she'd seen and photographed Champ. "You'll never convince me otherwise," she now says. Only after Mansi had contact with (and started reading books by) cryptozoologists—those with a preexisting inclination to believe in the reality of the Champ monster—did the identity of the object become cemented: it was Champ. They provided her with background information on Champ, told her about Samuel de Champlain's sighting (now proved never to have occurred), and so on. Taken scientifically and ethnographically, these pieces of evidence are highly suspect. But to a relatively unsophisticated layperson new to cryptozoology, it must have seemed very convincing.

Several cryptozoologists, and Zarzynski in particular, immediately accepted Mansi's photo as obvious and strong evidence of Champ (one notable exception was Greenwell, mentioned earlier). But just as we can look at clouds or shrubs and envision faces, we can look at ambiguous objects and see what we expect or hope to see. Zarzynski was clearly convinced that Mansi had taken a picture of Champ. His comments in a 1992 interview are revealing: "When I opened it up, I thought it was too good to be true. After putting in so many years of researching and field work, and then finally there was this color photo that clearly depicted a head and neck sticking out of the water. It was almost as if all my Christmases came to me at once."

As for Mansi, once she met with Champ researchers and advocates, she found a context that neatly fit her sighting and her photograph. The monster writers and cryptozoologists had scant hard data and virtually no photographic evidence, while Sandra Mansi had a personal sighting and a clear photograph of what seemed to be a living monster in the lake; they had the theories, credentials, and books to tell her what she had seen. It was, for both Mansi and the Champ proponents, a perfect fit.

Skeptics are often accused of being closed-minded to the possibility of unusual phenomena, yet it was Zarzynski who was closed-minded to the possibility that Mansi had photographed anything *but* the Lake Champlain monster. The bias toward belief is just as damaging as the bias against it. Science is an objective pursuit of the truth, and Zarzynski's immediate conviction that Mansi's photo was of the beast he had spent years searching for ("clearly a head and neck") was based more on hope and desire than on good evidence.

I'm not saying that Mansi's photo can't be of the Lake Champlain monster; I'm saying that it shouldn't have been latched on to immediately as such strong and definitive proof. It was—and remains—just an ambiguous form in the water, and serious investigators and researchers must not turn the photo into something it's not.

The fact that Mansi only later identified the object as Champ is significant; it demonstrates how ambiguous information can be reinterpreted according to changing influences and circumstances. If what

she saw on July 5, 1977, was clearly a living lake monster, why wasn't she convinced of that from the first moment she saw it? Ironically, Sandra Mansi herself was the original skeptic in this case.

This case—considered by many to be the best-documented lake monster sighting—serves as a cautionary tale for all investigators and researchers. We must be careful to approach evidence objectively and not influence eyewitnesses with our own preconceptions. We all bring our own assumptions and biases to the phenomena we investigate, but we owe it to ourselves (and to the integrity of cryptozoology) to do our best to minimize them.

The circumstances of Sandra Mansi's sighting and photograph of the Lake Champlain monster have been published in dozens—perhaps hundreds—of books, magazines, and Web sites. As I researched Champ, I was repeatedly struck by what appeared to be discrepancies between the published accounts and what Sandra Mansi had told me. In fact, I found at least a dozen significant differences. The basis for comparison is my interview with Mansi herself—not a second- or thirdhand source, but the original eyewitness. Some accounts contradict each other, for example, the version Mansi described for *Unsolved Mysteries* and the one that appeared in Loren Coleman and Patrick Huyghe's *Field Guide to Lake Monsters, Sea Serpents, and Other Mystery Denizens of the Deep* (2003). These different versions may be the result of journalistic errors, creative flourish (some mystery writers have a tendency to overdramatize for effect), or Mansi changing her story, but in any event, there are significant discrepancies among them:

1. Coleman says that Mansi "finally realized it was the grayish-brown head and long snake-like neck of a creature breaking the lake's surface." As I described earlier, Mansi didn't believe (or "realize") that it was a creature until several years later. At the time, she most emphatically did *not* think that it was a monster: "I thought it was maybe the sun. . . . Champ came into my mind, but I totally dismissed it."
2. Coleman states that Mansi was "scared to death." Mansi told me

(and *Unsolved Mysteries*) exactly the opposite: "I wasn't even scared, I'm just trying to figure out what I'm seeing."

3. Coleman claims that Mansi "rushed to get her Kodak Instamatic camera from her car." According to Mansi, she didn't rush to her car at all; in fact, she didn't leave the spot: "Tony [her fiancé] had gone back to the car to get the camera" to photograph the children. He returned with the camera as she was watching Champ and handed her the camera to snap the photo.
4. Several sources say that Mansi, following a divorce and several relocations, lost the photograph's negative. For example, Jerome Clark, in his chapter in *Mysteries and Monsters of the Sea* (Spaeth 1998), says that the family "misplaced the negative." Mansi says that she never lost the negative—she threw it away, which is what she does with all photo negatives, even to this day. Clark also states that Mansi's children were "unaware of what was happening in the water behind them [and] never saw the creature." Mansi says that all of them saw the creature and that her daughter had some difficulty dealing with the experience.

Some may reply that these are minor, irrelevant details, but I emphatically disagree. Details are important, especially in monster investigations. In a field so reliant on anecdotes and sightings, with information that is often fragmentary and incomplete, details can be absolutely crucial. If these details are wrong (or have changed significantly over time), what other details might be wrong? Identifications and sightings often hinge on a few important details, and it's essential that the accounts be as complete and accurate as possible. One example of an important detail omitted from *every* published account of Mansi's sighting is the fact that the supposedly living creature was as deaf as a post. A large, presumably complex aquatic creature that's insensible to sound? This is a detail that I came across only by getting the full and complete story from the source.

The Mansi sighting and photograph constitute perhaps the most important eyewitness account in cryptid research. It is unique in cryptozoology and is touted as the best evidence for lake monsters.

Surely greater attention to detail is called for in such an important case.

I'm not singling out these writers as sloppy scholars; in fact, I regard them as among the best and most responsible writers on cryptozoology (which is why we were pleased to have Coleman write the foreword to this book). I have found far worse problems with other authors. It's precisely because I hold these authors' work in high regard that I'm disturbed by these inconsistencies.

I asked Coleman about the discrepancy involving whether Mansi's fiancé went to the car to get the camera or she went and got it herself. He states, "I take the above merely as evidence that Sandra Mansi has told three versions of where and how she obtained the camera." Yet if her recollection is really so bad or the story has changed so much—that is, she doesn't know whether she left the spot, crossed a field, retrieved a camera from the car, and came back—her story is in trouble. That's a pretty big detail.

As for the other discrepancies, Coleman stands by his account: "The basis of the summary of the Mansi account remains my first-hand interview and listening to Sandra Mansi telling her story as well as examining what she said 'at the beginning.'" Fair enough; it is well established that memories change over time, and mistakes can creep into eyewitness accounts. Still, Coleman is only partially correct about reporting what Mansi said "at the beginning," since she told her story to researchers not hours or days after the sighting but four years later. I don't doubt that Mansi's story may have changed in some respects, but without firsthand access to other early interviews, all I can go by is what she told Joe Nickell and me.

The reporting problem is compounded when future writers use incomplete passages as a valid and accurate account. It is no secret that shoddy scholarship is prevalent in paranormal writing, making accurate and responsible investigations difficult. In a column in *Fortean Times* contributor Nick Warren (1999) commented on the often lax scholarship found in paranormal and believer literature: "One of the most irritating features of fortean studies is the tendency of the same material to be copied from book to book, or periodical to periodical, without any

of the authors troubling themselves to check on the citation's origins. Now that so many branches of this endeavour like to accord themselves the status of 'sciences' (UFOlogy, cryptozoology, cereology) this tendency is becoming nothing short of scandalous. Whenever the exercise is actually undertaken, it often happens that the 'mystery' mysteriously disappears. . . . If we wish to be regarded seriously, we must use serious methods of enquiry."

REFERENCES

Coleman, Loren, and Patrick Huyghe. 2003. *The field guide to lake monsters, sea ser*pents, and other mystery denizens of the deep. New York: J. P. Tarcher.

Meurger, Michel, and Claude Gagnon. 1988. Lake monster traditions: A cross-cultural analysis. London: Fortean Tomes.

Spaeth, Frank, ed. 1998. Mysteries and monsters of the sea: True stories from the files of Fate magazine. New York: Gramercy Books.

Warren, Nick. 1999. Checks and balances. Fortean Times 119:47.

Appendix 2

Eyewitness (Un)reliability

On January 21, 2004, I came across a small news item about a father and son in Florida. It was a tragic story involving a man named Dennis Plucknett and his fourteen-year-old son Alex. Plucknett, his two sons, and a friend went hunting at a camp in northeastern Florida. It was early morning, and the members of the group had become separated. Alex was sitting in a ditch about 225 yards away from his father when someone yelled, "Hog!" The elder Plucknett grabbed his .308-caliber Ruger rifle with scope, steadied his aim, and fired one round at a boar in the distance. Within minutes, Alex was dead of a massive head wound, killed by his father's shot.

As the first line of the Associated Press report read, "A father mistook his teenage son's black cap for a wild boar during a weekend hunting trip and shot the boy to death with his rifle." Hunting accidents are fairly common, and, not being a hunter, I didn't pay much attention to the story at first. A tragedy, yes, but it had nothing to do with me or anything I could relate to. Or did it? As I read on, I realized that this was an excellent example of the fallibility of eyewitness testimony—the backbone of much cryptozoological research and evidence.

It was an accident, a terrible mistake, but there was more to it than that. The elder Plucknett mistook his son's black toboggan cap for a boar. This longtime hunter couldn't distinguish a piece of cloth less than a square foot wide from a living, full-size animal. Dennis Plucknett had years of experience, good vision, and a rifle scope. He believed he had a boar in his sights, instead of his son's head. Because someone called out "Hog," Plucknett's mind was searching for a hog, and his

expectations clearly guided his perceptions. A small black cap became a hog in his mind.

A similar process occurs in lakes and woods where mysterious creatures are said to lurk. Waves, large fish, and logs are thus turned into lake monsters; bear, elk, or other creatures are turned into Bigfoot. The process is well documented, but many cryptozoologists insist that eyewitnesses are more reliable than they are. Monster researchers and writers often mention that an eyewitness is an upstanding member of the community (or a reverend, or a police officer), as if that somehow ensures against misidentification. Would such cryptozoologists argue that Mr. Plucknett is not an upstanding citizen, or that he is more likely to be mistaken than others?

We also see another common element of eyewitness identifications: overconfidence. Plucknett was absolutely certain about his identification; we can assume that there was no doubt in his mind that he had a boar in his sights. If he had been uncertain, he wouldn't have pulled the trigger. If he hadn't shot his son, if he had missed or the gun had misfired, he would probably still be absolutely sure that he had seen a boar, because it wouldn't have been proved otherwise. Now transfer this situation to a Bigfoot sighting in a wooded area or a monster sighting on a lake: A person sees something large and dark move in the woods or in the water. He turns and, for a few seconds, observes an unknown creature disappearing into the brush or into the lake. He's absolutely sure of his identification and reports it with total conviction and confidence to a researcher. Yet without a body or photograph to compare the description to, we can't be sure what he saw. All we have is a sincere, believable, convinced eyewitness. Yet eyewitnesses can be absolutely honest and certain—and dead wrong.

Mistaken or hoaxed eyewitness reports had terrible consequences in 2002 when snipers terrorized the Washington, D.C., area. Based on eyewitness descriptions, law enforcement agencies alerted the public to be on the lookout for suspects in a white box truck or white van. Fairly detailed descriptions were offered, including a roof rack. Thousands of vehicles were stopped and searched, jamming highways for miles. The focus on a white van intensified after the October 14, 2002, shooting

outside a store in suburban Virginia, when a man claimed to have seen the shooter standing next to a white- or cream-colored van. It was later revealed that the man had lied to police and made up the story.

At least one "eyewitness" lied, and others got it wrong. The snipers, John Lee Malvo and John Allen Muhammad, were found in a dark blue 1990 Chevrolet Caprice. "We were looking for a white van with white people, and we ended up with a blue car with black people," said D.C. police chief Charles H. Ramsey. In the end, the emphasis on the white van by both the police and the public almost certainly cost innocent lives. According to the *Washington Post,* the police had stopped the Caprice on at least ten separate occasions in the area of the sniper attacks, but it had been let go because it wasn't the white van that eyewitnesses had reported.

If eyewitnesses can be mistaken in these life-and-death cases, they're probably no more accurate in monster sightings and descriptions. This doesn't mean that all eyewitness accounts are mistakes, though many probably are, as most reputable cryptozoologists agree. But the psychological literature is clear and uncontested: we are all subject to misunderstandings, misperceptions, and mistakes, and we are all overconfident in those beliefs and perceptions. These cases can serve as an important lesson for investigators of all types, and cryptozoologists in particular. Can you always trust your eyes and perceptions? How sure can you be about what you see? Sure enough to take a life if you're wrong?

There is also a bias that leads to what's called a "file drawer effect": sightings that seem mysterious at first but are quickly proved otherwise are only rarely reported. With few exceptions, researchers and investigators don't hear about eyewitnesses who were confident in their initial reports yet proved wrong.

Cases like that of Dennis Plucknett are examples of verified misidentifications. But they are only a small fraction of such cases and are notable for the fact that they were proved wrong and exposed. Logically and statistically, it stands to reason that for every case that makes the news or gets written up, dozens or perhaps hundreds of similar misidentifications aren't reported. Witnesses may feel silly admitting they were fooled or they may believe that their sightings aren't worth

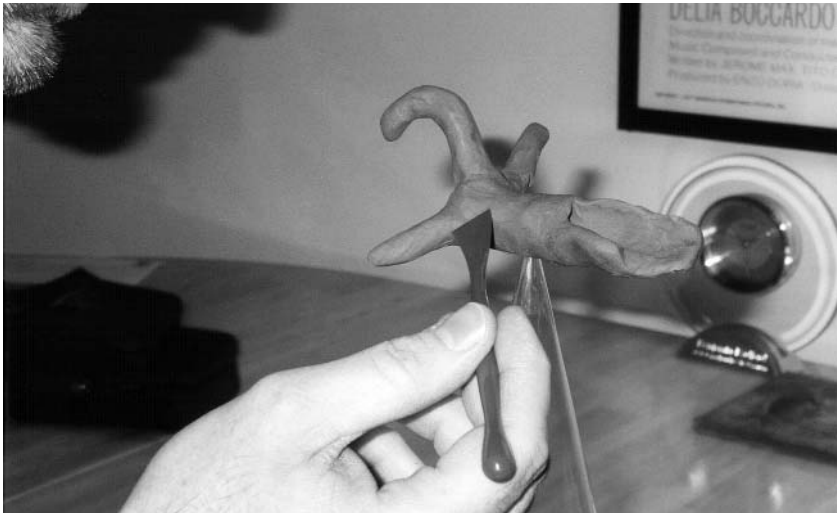
reporting, since nothing unusual was discovered. If I realize that I've been fooled by a floating log or a strange wave, why would I bother to mention it to monster researchers? And even if I did, would they be interested and recognize the value in my report?

This fundamental—but rarely recognized—bias in eyewitness (and investigator) reporting naturally leads to a focus on the unexplained sightings, while the explained ones are ignored or downplayed. But to accurately understand eyewitness accounts, researchers can't pick and choose. They must consider *all* reports, focusing not just on the unidentified but also on the misidentified. Only with this scientific and statistical understanding does a valid picture emerge, demonstrating how easily we can misunderstand what we see.

Appendix 3

Animating the Champ Photograph

Sandra Mansi's photograph of the Lake Champlain creature renewed popular interest in Champ, and it has been studied and discussed for almost thirty years. Some critics thought that it might be a waterfowl, a jumping fish, or possibly a floating log. I favored the last theory, yet no one had actually shown how a floating log could look like the image Mansi had captured. I took on the task and created an animated sequence that shows how a floating log might, from a certain angle, look like a rising and submerging lake monster. Figures A.1 to A.5 are stills from that animated sequence.



Figures A.1 to A.5 Model of a tree trunk sculpted from clay to show one possible explanation for the object in the Mansi photograph. (Photos by Benjamin Radford)

Appendix 4

Ogopogo Film and Video Analysis

Our primary source for images of the Lake Okanagan creature, Ogopogo, was Arlene Gaal, an invaluable resource and a tireless researcher. Gaal has collected photographs, videos, and sighting reports since she moved to Kelowna, British Columbia, in 1968. During our investigation, she shared her photos and videos with Joe Nickell, John Kirk, and me, as well as with the National Geographic producers, explaining picture by picture what each image suggested to her.

In 2004 several Ogopogo films were professionally analyzed for the SciFi Channel show *Proof Positive.* Although it was the most thorough and sophisticated computer analysis done to date, each film failed to provide good evidence for the monster. In one case, when the image was stabilized and compared to fixed objects in the background, the investigator concluded that the dark humps that appeared to be moving weren't moving at all. In another, the Ogopogo humps were misaligned in the water and therefore couldn't be from the same creature—suggesting waves or several small animals (perhaps beavers or otters) instead of one large monster. One video was interesting because of the eyewitnesses' disagreement about what it depicted; what one person described as "three very distinct humps," another saw quite plainly as *waves* created by "something pushing the water up."

One widely seen Ogopogo video shot by a man named Ken Chaplin became a local joke, with viewers pointing out that the "mystery creature" was obviously a beaver swimming with its head raised—the tail slapping the water was a telltale sign. John Kirk was "flabbergasted at how Chaplin could possibly have thought he captured Ogopogo on

tape. He had categorically stated that the animal was between nine and twelve feet long, but what we were seeing on the screen was obviously nowhere near that size." One Kelowna resident told me that many local folks were embarrassed when the film was broadcast because it made them look like they didn't know a beaver when they saw one. (I pointed out that it was probably an honest mistake, and besides, it was an *American* TV show, *Unsolved Mysteries,* that had paid $30,000 for the most expensive beaver footage in history!)

Most films, of course, are more ambiguous, and some misidentifications are to be expected. The poor quality of the majority of Ogopogo images means that they yield little information, but Gaal offered a few as the "cream of the crop." None had been thoroughly examined, and she was pleased to have our expertise and the National Geographic crew available. Here I highlight our analyses of two of the best Ogopogo films.

THE THAL FILM

On August 11, 1980, a tourist group near the Bluebird Bay Resort Motel in downtown Kelowna saw a dark green creature about sixty feet long out on the lake. The object was said to be about a hundred yards away, moving at twenty-five miles per hour. The object passed back and forth in front of the group four times and was observed for about forty-five minutes. One Vancouver resident, Larry Thal, had a Super 8 movie camera with him and managed to capture about ten seconds of the activity.

Gaal owns the unedited 8mm film, but no projector was available; the best we had was a VHS transfer done many years earlier—not by a paid professional but by "a friend who had some sophisticated equipment." This was, Gaal said, the first time this film had been examined by experts. As we watched, several dark humps moved around briefly out in the water. Gaal estimated that each protrusion "appeared to be two feet or more out of the water" and three to five feet long. Yet the footage shows nothing of scale nearby, so distance and size are impossible to verify. It did appear to be one or more live creatures—not a log or a wave—but they could have been a number of known animals.

As we watched, with Gaal narrating and the TV crew looking on, the segment looped twice, then an image of a dark, vertical object froze on the screen. Gaal described a head and neck in the freeze-frame. In her book *Ogopogo* (1986, 54) she wrote: "One frame clearly shows a prehistoric-like image, similar to the sketch drawn by the Wong family during their 1976 bridge sighting. The next frame really caught my attention. The mouth opens as the jaws do indeed separate. Nothing like this had ever been nor has since been captured on film." But in all honesty, Joe and I saw little of what Gaal described. I didn't see a mouth or a prehistoric image. All I could see was a thin, dark, vertical form. It was nonetheless very unusual and presented a real mystery; this wasn't a log, a wave, a beaver or otter, or any other known animal's neck or appendage. Curiously, Arlene said that the eyewitnesses hadn't reported seeing the long neck come out of the water. A review of their signed, written description in Gaal's book (1986, 52) confirms this. Why would a detail as remarkable as a huge, dark neck and head with jaws separating not be noted by over a dozen eyewitnesses?

I also noted that the "neck" was significantly darker than the darkest black in the frame. This suggested to me (and to Ian Kerr, the National Geographic cinematographer I later consulted) that the dark spot may have been dirt or debris on the 8mm original or a glitch accidentally superimposed during the (nonprofessional) video transfer. I asked Gaal to replay the video because, though I had been watching closely, I had somehow missed the neck rising out of the water. The video just cut from a film of the two small objects to a still shot of one long "neck." "It's only in this frame," she explained. That clinched it: since the dark neck sticking up out of the water appeared in only one frame—it can't be seen rising out of the water or sinking back into it—the Ogopogo neck is almost certainly a film artifact. The eyewitnesses didn't report seeing the long, dark neck because they *didn't* see it.

Further expert analysis was provided by forensic video specialist Grant Fredricks, who works for the FBI. Using the best available originals and state-of-the-art image stabilization and clarification techniques, Fredricks (2005) found nothing monstrous in the videos. He concluded that the Thal film "has all the characteristics of waves mov-

ing. . . . I don't see anything that would tell me this is anything out of the ordinary."

THE FOLDEN FILM

The best evidence of Ogopogo, according to Gaal and other writers, is about a minute of footage shot in 1968 by a man named Arthur Folden. On a sunny August day, Folden and his wife were driving on Highway 97 south of Peachland when Folden noticed "something large and lifelike" out on the calm water. They immediately pulled over on a nearby bluff overlooking the lake, which, according to Gaal, "at this point runs fairly high above the lake and about three hundred yards from the shore." Folden, an 8mm movie buff, pulled out his camera and captured the object in the water. Concerned that he was near the end of his film, he stopped and started the segment several times, turning the camera off when the object submerged and starting again when he saw it resurface.

Though we were unable to see the entire unedited film, we did our best with what was available. Joe and I examined a video clip containing about forty-five seconds of footage. The object was estimated at seventy feet long, according to Folden and his wife. Though the quality is mediocre at best (it's fuzzy and scratched), Folden was professional enough to hold the camera steady most of the time. Thankfully, the film begins with a wide-angle shot, allowing us to roughly estimate Folden's distance from the shore. The object Folden filmed was estimated at another two hundred yards out in the lake. If the camera was about three hundred yards from the lakeshore, then the object, whatever it was, was seen at five hundred yards. If this estimate—nearly a third of a mile—is correct, the object would have to be truly monstrous to be seen with the naked eye from the highway.

According to Loren Coleman in his *Field Guide to Lake Monsters, Sea Serpents, and Other Mystery Denizens of the Deep,* "The short footage shows a large creature diving and reappearing, until it finally takes off, churning up waves and leaving a heavy wake, before making its last dive. Based on the size of pine trees onshore, about twenty-five feet tall,

the creature was estimated to be about sixty to seventy feet long." The film begins by showing what appears to be a noticeable disturbance in the water. Since it isn't clear how far out in the lake the disturbance is, there's no way to tell how large an area it covers. Within a few seconds, the object begins moving to the right of the screen. A tree in the foreground provides a basis for comparison—not necessarily of the creature's size, but of its horizontal journey. The object picks up speed as it moves away from the tree, even creating a noticeable crest as it parts the water. The object then slows somewhat, and the film ends.

In an independent inquiry, Fredricks (2005) concluded that the creature Folden had filmed was far smaller than previously thought and suggested that the unidentified beast was almost certainly among the known lake fauna, probably a large fish. "We can see that there's a light object in front of this darker object. This object is quite reflective and very, very consistent with the side of a silvery fish," he noted.

It's important to remember that although the footage itself lasts about forty-five seconds, Folden reported that the whole sighting lasted two to three minutes. Distance is crucial, because an object moving across a film frame can be either a massive object covering a great distance or a much smaller object covering a much smaller distance, depending on how far away it is. Without something of known scale near the object, it's difficult or impossible to distinguish between the two possibilities. We could, however, use elapsed time to roughly estimate distance.

Though we knew that many specifics would be impossible to establish nearly forty years after the fact (and with Mr. Folden unavailable to help), we were able to set some parameters and answer a few basic questions. For example, how large must an object be for Folden to see it and film it from his position along the highway? Are small or medium-sized animals such as fish or otters discernible from his position, or merely imperceptible dots?

Having previously conducted field experiments to reconcile lake monster sightings with information from photographs, I was asked to bring my knowledge and experience to bear on the Folden film. With input from Joe Nickell and John Kirk, I designed and arranged a set of

experiments to see what information we could glean from Folden's film, despite the nearly four-decade time lapse. Our experiment was filmed for the National Geographic documentary.

We located a site along Highway 97 that all of us agreed was either the original site or very near it. For the experiments, we took photographs of the Folden site and placed a survey boat out on the lake at set distance intervals. Runnalls Denby, a professional land surveying firm located in downtown Kelowna (less than a block from the city's famed Ogopogo statue) was contracted to help with these tasks. The resulting surveyor's map (figure A.6, next page) shows the distance from the eyewitness's position to various plotted points out on the lake. We took photos and measurements at various distances from shore, including at the distance Folden estimated. As the experiment progressed, it was immediately clear to all of us that Folden had dramatically overestimated how far away the creature was. Because of this, we can also conclude that the creature's speed had been overestimated. It was nearer to the camera, and thus covered a relatively short distance (perhaps a hundred yards) during its two- or three-minute journey.

Skeptic and proponent alike agreed on several conclusions: (1) we had located the original site of the Folden film, or one very near it—a feat never before accomplished; (2) the object in the water was indeed a living creature of some sort; and, most important, (3) the creature's distance from the camera had been greatly overestimated, meaning that the creature was much smaller than previously thought. Perhaps luck and better technology will one day yield irrefutable proof of Ogopogo, but until then, it seems that the beast is as shy as ever.

REFERENCES

Coleman, Loren, and Patrick Huyghe. 2003. *The field guide to lake monsters, sea serpents, and other mystery denizens of the deep.* New York: J. P. Tarcher.

Fredricks, Grant. 2005. Quoted in Lake Monsters: Is It Real? series. National Geographic Television, August 20.

Gaal, Arlene. 1986. *Ogopogo: The true story of the Okanagan Lake million dollar monster.* Surrey, B.C.: Hancock House.

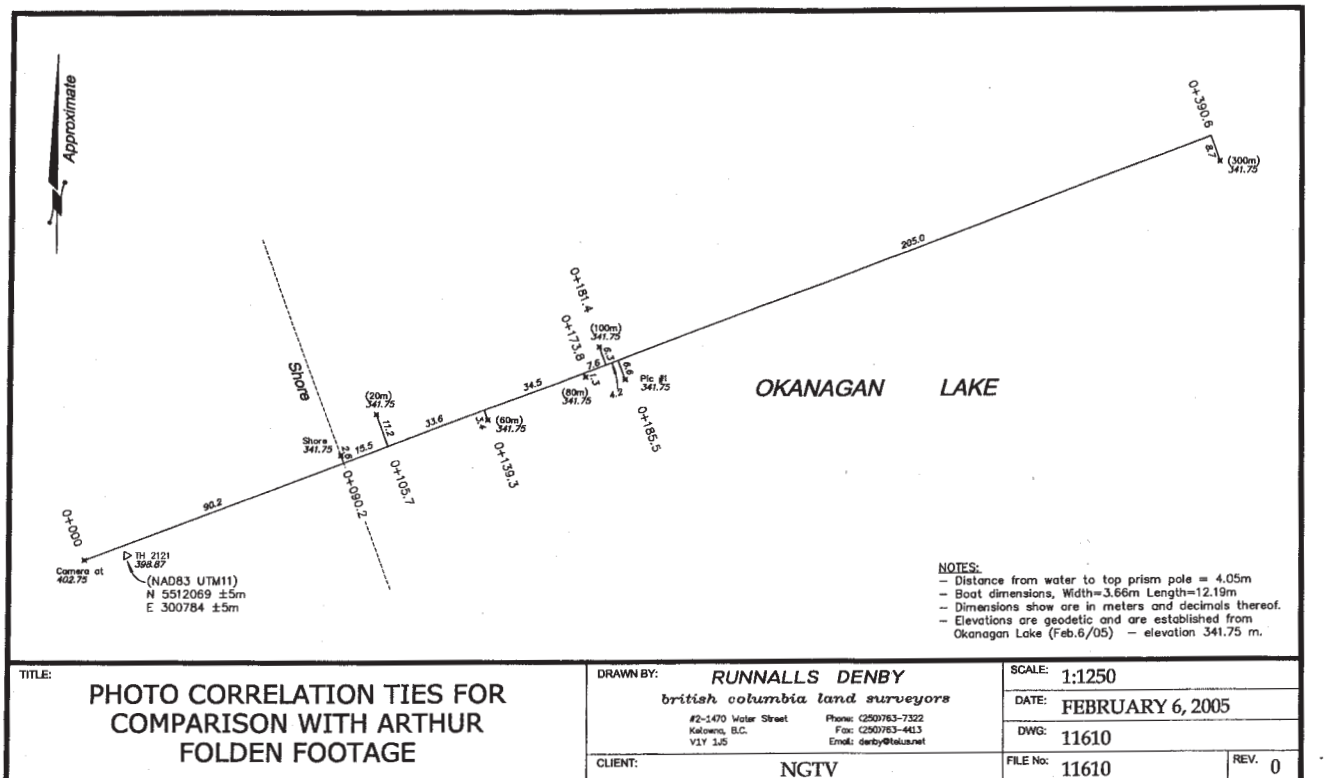


Figure A.6 Surveyor's map used in the experiment involving the Folden film of Ogopogo. (Prepared by surveyors Runnalls Denby, Kelowna, B.C.)

Index

Academy of Applied Science, 21–23
Africa, 146
African goliath frog, 140
Alien Animals (Bord and Bord), 6
Alkali Lake, Nebr., xii
Allison, Susan, 117
All Wet Aquatics, 138
American eel, 95
America's Loch Ness Monster (Discovery Channel documentary, 2003), 64–65
Anderson, Lyall, 14
angels, 1
Anguilla rostrata, 95
antlers, 36, 39; as hoax monster tooth, 15
April Fool's Day, 18
Argentina, 145
Associated Press, 161
attacks/killing, by monsters, xii, 1, 9, 11; "Lukwata," of Lake Victoria, Africa, 146; N'ha-a-itk/Ogopogo, 122–23, 134; "Wenbo," of Tibet, 145
"Auli," of Africa, 146
Aylmer, Lake, Quebec, 142

Bala, Lake, North Wales, 144
"bandwagon effect," of sightings increased by publicity, 40, 45, 134
"Bangles fallacy," of mistaking art for reality, 128
"banjo-playing water-being from Hindustan" (Ogopogo song), 113
Barnum, P. T., and "Champ," 27
Barr, Robert, 14, 24
Barrie, Ontario, 141
Bartholomew, Paul, 29
Bartholomew, Robert, 29, 66–67
basilisks, 1
basilosaurus, 117
Bates, Mrs. (witness of Lake George "monster"), 103
Bates, Mrs. (witness of "real" Lake George monster), 108
beavers, 150, 170; at Lake Okanagan, 113, 117, 120, 168–69; at Lake Simcoe, Ontario, 142; at Lake Utopia, New Brunswick, 138; "Memphre" mistaken for, *Fig. 3.3*, 73, 76; at Silver Lake, 87
Beaverton, Ontario, Canada, 140
"Beaverton Bessie," 140. *See also* "Igopogo," of Lake Simcoe
Beebe, David, 73
bellows, allegedly used for Silver Lake serpent hoax, *Fig. 4.3*, 80, 84–85
Beluaaquatica champlainiensis. *See* "Champ" of Lake Champlain
beluga whales, 64–65
Beothuk Indians, 89
Beothuk Trail Tourism Committee, 96–97

Bermuda Blob, 4, 6
Bible, 1
Bigfoot, 4, 7, 17, 60, 111, 127, 150, 162
Bigfoot Exposed (Daegling), 127
Binns, Ronald: and dolphins, as mistaken sighting, 37; and Loch Ness Monster, 8, 10, 11, 12, 13, 15, 17–19, 21, 24, 38, 39, 67, 86, 88
biosonar, 64–65
Bizarre Beliefs (Hoggart and Hutchinson), 19–20
Blackman, W. Haden, 10, 67, 135; and "Champ," 9, 27; and Ogopogo, 111, 113, 117, 124, 134
"blobsters," 4, 6, 10
Bluebird Bay Resort Motel, Kelowna, B.C., 169
boat wakes, mistaken for monsters, 13, 14, 39
Boese, Alex, 15, 24
"bogeyman" method of social control, 125, 155
Boisvert, Jacques, 74, 76
Bolton, Richard E., 101, 107, 109
Bonavista, Newfoundland, 126
Bondura, Darryl, 115, 135
Bord, Colin, 6
Bord, Janet, 6
Bowen, Dafydd, 144
Bragg, Russell, 95, 97, 98
breeding, lack of evidence of multiple monsters for, 24, 40, 54, 89–90, 138, 149
Brewer, Jacqueline, 140, 147
Brimblecombe, W. H., 113, 135
Bristol, Vt., 31
British Broadcasting Corporation (BBC), Loch Ness monster sponsored search, 23, 24
British Columbia, xii, xiv, 7, 27, 49, 111, 132, 141, 168; lakes with monsters, 113. *See also* Ogopogo; Okanagan, Lake
British Columbia Scientific Cryptozoology Club, 42, 131
Brown, Arch, 141–42, 147
Brunnen, Switzerland, 144–45
Buckland, Frank, 123
Buffalo Commercial, 80
Bull, John, 113, 135
bullfrog, giant, *Fig. 8.1*, 138–40
Bulwagga Bay, Lake Champlain, 29–31, 35, 45
Burchfiel, Kurt, 143
Burlington, Vt., 33
Burlington Free Press, 66
Burton, Andrew, 92, 98
Burton, Helen Brown, 74, 77
Button Bay State Park, 31, 38

Caledonian, 73
cameleopards, 2–3, *Fig. I.2*
Cameroon, 146
Campbell, Alexander, 11, 13, 15, 17
Canadian Conservation Institute, 139
"Capt. Crum," 35, 39
Cartwright Bay, Lake Ontario, 108
Cedergren, Magnus, 144
centaurs, 1
cereology, 160
cetaceans, xiv–xv. *See also* whales
Chad, 146
Champ: Beyond the Legend (Zarzynski), 35, 48, 53
Champ Day celebration, 29, 66
Champlain, Lake, xii, 6, 7, 9, 27–70, 134, 142, 150, 153–60; age of, 27, 149; beluga whales possibly in, 64–65; biosonar heard in, 64–65; expedition to, 29–34; geology of, 27; heavily wooded shore of, *Fig. 2.11*, 60; hydrography of, 61–62; map of, *Fig. 2.1*; "Narrows, The,"

48; and seiche (underwater wave), 37, 60–61; shallowness of parts of, 33; sturgeon in, 31, 33, 35, 37, 41, 117; tourism industry, 66; as Vermont's largest lake, 71
Champlain, Samuel de, 27, 34, 35, 37, 40, 67, 153, 155
Champlain Bridge, 31
"Champ" of Lake Champlain, 7, 9, 27–70, 71, 137, 149; babies, 42–43; conclusions, after investigation, 40–41, 65–67; and culture of area, 66–67; deafness of Mansi's sighting of, 54, 158; description, 35–36, 40, 42, 44; Discovery Channel documentary of (2003), 60, 64–65; distances viewed from, 36; expedition to investigate, *Fig. 2.2*, *Fig. 2.10*, *Fig. 2.11*, 29–34, 56–57; feeding fish, as mistaken sighting of, 42; horns and antlers of, 39; Indian lore associated with, 34, 89, 121; lack of photographs after Mansi photo, 66; lack of skeletal evidence of, 67; merchandising from, 27, 66; misreporting about, 153–60; mistaken sightings, 36–37, 165–67; numbers of sightings over time, 39–40; photographs, *Fig. 2.5*, 41–63; as plesiosaur, *Fig. 2.8*, 27, 53, 73, 145, 149; recent sightings and theories, 27, 29; sightings, *Fig. 2.3*, 31, 33, 34–40, 43–44, 45; spike in sightings, after publication of Mansi photograph, 134, 150; sturgeon, as mistakes for, 37, 117; supposed capturing and eating of, 42; tracing from enlargement of Mansi photograph, *Fig. 2.7*; videotape of, 41–42. *See also* Mansi photograph of "Champ"
Champ Quest, 42
Champ Quest: The Ultimate Search (Hall), 42
Champ sighting signboard, *Fig. 2.3*, 31, 45, 153
Chaplin, Ken, 120, 168–69
Chaplin video, of Ogopogo, 120, 168–69
Chicago Times, 85
Chilean blob, 10
China, 1, 145
Chinese Nessie, 145
Chorvinski, Mark, 21, 24
Citro, Joseph A., 71, 72, 73, 77
Clark, Cumberland, 134
Clark, Jerome, 34, 43, 47, 54, 68, 131, 135, 158
Clayton, Jerry, 64, 68, 141, 142, 147
Coleman, Fred B., 138, 140, 147
Coleman, Loren, xi–xv, 6, 10, 68, 160, 173; and "Champ," 34, 40; and Mansi photograph of "Champ," 157–58, 159; and Ogopogo, 171–72
"Coleman frog," *Fig. 8.1*, 138–40; authenticity of, 139–40
Collier's Encyclopedia, 118
Collins, Michael J., 49, 69
Collins, Rita, 31
Collins Cabins, Port Henry, N.Y., 29, 31
Colombo, John Robert, 108, 109, 137, 138, 141, 147
Columba, St., 11
Columbus, Christopher, xii
Congo, 146
Conraua goliath, 140
Cosmographia Universalis (Munster), 1
Costello, Peter, 121, 127–28, 135, 140, 147
Crane, E. F., 66
Creek Indians, xi
Crescent, Lake, *Figs. 5.1–5.2*, *Figs. 5.4–5.5*, 7, 89–99

Crescent Elementary School, 98
"Cressie" of Lake Crescent, *Fig. 5.2*, *Fig. 5.5*, 89–99, 137; conclusion, after investigation, 98; description, *Fig. 5.3*, 90, 92; as giant eel, 93, 95–96, 98; lack of photographs of, 89; lack of skeletal evidence of, 90; sightings, *Fig. 5.4*, 89–95
Cressie's Castle, 97, 99
crocodiles, 2, 23, 144, 146
crop circles, 19
Crown Point, N.Y., 31
Crum, Captain, 35, 39
cryptids, xi
cryptozoologists, 4, 29; and "Igopogo," of Lake Simcoe, 141; and Mansi photograph of "Champ," 45, 50, 153–60; and Ogopogo, 111, 114, 131
cryptozoology, xi, 4; importance of evidence in, 153–54
Cryptozoology A to Z: The Encyclopedia of Lake Monsters, Sasquatch, Chupacabras, and Other Authentic Mysteries of Nature (Coleman), xv
Crystal Lake, 71
cursed places, 9, 126
Curtis, G. Smith, 10
Cusick, David, xii

Daegling, Dave, 127, 135
Daily Mail, 18
Daily News, 104
Daily Planet (Discovery Canada TV program), 141
Dakatua, Lake, New Britain, 146
Dash, Mike, 6, 10, 63, 68
Davis, Mr. (witness of Lake George "monster"), 103
deer, swimming, 13, 21, 39, 73, 86, 87, 138
Deffenbacher, K., 56, 69
DeMara, Paul, 119–20, 135
DeMara Video (of Ogopogo), 119–20
Department of Environmental Conservation, 87
Department of Oceanography, University of British Columbia, 49
"Devil's Hole" cave, Niagara Falls, 9
dinosaur, 40
Dinsdale, Tim, 15, 21
Discover magazine, 34, 57, 153
Discovery Canada TV, 141
Discovery Channel, 60, 64, 143
divers investigating monsters, *Fig. 7.2*, 42, 65, 95, 114, 144, 146
djinn, 1
Dockstader, Noel, 114
dolphins, 37, 64–66, 146
Douglass, Harry S., 83, 85, 88
dragons, xi, 1, 74, 97, 108, 131, 145; winged dragons, 2, 35
driftwood, 21, 31, 33, 86, 96; as "Champ," *Fig. 2.9*, *Fig. 2.13*, 37, 53–55, 60; hydrographic explanation of driftwood rising and falling, 61–62. *See also* logs, as mistaken monsters
ducks, 11, 113, 145
Dungeon, The, Bonavista, Newfoundland, *Fig. 7.7*, 126

ears, 102, 106, 117, 128, 130, 144
Eberhart, George M., 89, 95, 99, 141, 147, 151
eels, 93, 95–96, 98
Ellis, Bill, 125, 135
Encyclopedia Britannica, 140, 147
England, 1
Enlightenment, 1, 3–4
Erie, Lake, 142–43
Ethiopia, 146
evidence, of lake monsters, xii, xv, 4, 6–7; breeding, lack of

multiple monsters for, 24, 40, 54, 89–90, 138, 149; historical evidence, 86; importance of, for cryptozoologists, 153–54; from Indian lore, 34, 89, 113, 121, 124; lack of, for "Champ," 40–41, 45–46, 63, 66–67; lack of, for "Cressie," 90, 98; lack of, for Loch Ness monster, 14–15, 41, 149; lack of, for Ogopogo, 114, 115, 120, 127; lack of, for "Selma," 143; lack of skeletal, 6, 14–15, 41, 67, 90, 115, 149; Mansi photograph of "Champ," lack of in, 45–46; petroglyphs, 128–30; powder horn with dragon, of "Champ," 35; sonar evidence, 23, 63; sonar evidence of "Champ," 64–65. *See also* eyewitness testimony; *individual films/videos*; photographs; scientific investigations of lake monsters; sightings of monsters; videotape
expectant attention, 36, 88
extinct animals, xiv, 27, 29
extraterrestrials, 150
eyewitness testimony, xii, xiv, xv, 7; confidence, as element of, 42, 162; errors of, 47, 150; fallibility of, 94, 120, 161–64; "file drawer effect," 163–64; importance of details given by, 9, 154, 158–59; interviewing eyewitnesses, 8, 9, 114, 146; and overestimation of size, 58–59, 87, 173; psychological literature about, 163. *See also* mistaken sightings; sightings of monsters

fairies, 1, 89
Fate magazine, 16
Fauna Communications Research, 64
Federal Bureau of Investigation (FBI), video specialist, 120, 170–71
Ferrand, John, Jr., 113, 135
ferries: across Lake Champlain, 33–34, 39; across Lake Okanagan, 131
Field Guide to Lake Monsters, Sea Serpents, and Other Mystery Denizens of the Deep, The (Coleman), xv, 157, 171
Field Guide to North American Monsters (Blackman), 27
Fielding, Todd, 83, 84, 88
"file drawer effect," 163–64
film artifact, giving mistaken "neck" of monster, 170
fins, 130; on "Champ," 35; on "Cressie," 94–95; on Lake George "monster," *Fig. 6.4*, 106; on Loch Ness Monster, 13; on "Storsjoe," of Lake Storsjoen, Sweden, 143
fish, as mistaken sighting, 12, 37, 42, 172
flippers, *Fig. 1.4*, 13, 21–23
Folden, Arthur, 119, 171
Folden Film (of Ogopogo), 119, 131; analysis, 171–73, 174; distances viewed from, *Fig. A.6*, 171–72; experiment to emulate, *Fig. A.6*, 172–73
folklore, xi, 83–84, 89, 124; about Ogopogo, 113, 121; creatures of, 1; Indian lore, 34, 89, 113, 121, 124
Forrest, Tom, 37, 68
Fort Cassin, Lake Champlain, 38
Fortean Times, 6, 63, 144, 159
fossils, hoaxes of, 14
Foster, Peter, 105
Fredericks, Grant, 120, 135, 170–71, 172, 173
Fredericton, New Brunswick, Canada, 138
Frieden, B. Roy, 46, 48, 62, 68

Fromm, Garfield, 133, 136
Furlow, Herbert M., 66, 68

Gaal, Arlene, 136, 173; and depth of Lake Okanagan, 113, 126; and Ogopogo legends, 121, 125, 134; and Ogopogo sighting analysis, 119, 120, 169, 170; and Ogopogo sightings, 114, 115, 117, 168
Gagnon, Claude, xii, 34, 37, 69, 124, 127, 130, 136, 153, 160
Ganassin, Celeste, 125–26, 130, 136
Ganoidei fish, 35
garfish, 34–35, 37, 40
Gatschet, Albert S., xi
Gaudet, Sam, 137, 138, 147
geese, 113
genies, 1
Genoni, Tom, 16, 24
"Gentle Memphrie" (song), 74
George, Lake, 7, 101–9
Gesner, Conrad, 2
giant eels, 93, 95–96, 98
giant squid, *Fig. I.3*, 4
Gillett, Truman S., 83, 85
giraffes, 2–3, *Fig. I.2*
"globsters," 4, 6
Godin, Alfred J., 37, 68
Gould, Rupert T., *Fig. 7.5*, 13–14, 18, 24, 36, 41, 68, 87–88, 136
Grand Okanagan Lakefront Resort, 114
Grant, John, 36, 68
Gray, Hugh, 15
Great Glen fault, 14
Great Lakes, 142–43
Great Sea Serpent, The (Oudemans), xiv
Green, Susan, 34, 68
Greenwell, J. Richard, 50, 58, 68, 154, 155, 156
Grishkot, Joann, 107
Grishkot, Walter, *Fig. 6.1*, 102, 106–7, 109
Guinness Book of Records, The, 140, 147

Haggett, Robert, 95
Hague Bay, N.Y., 101
Hague Community Center, 104
Hague-on-Lake, Lake George, 105
Hall, Dennis Jay, 41, 42, 67, 68, 153
harpies, 1
Hay Springs, Nebr., xii
Henry, Ginger, 101, 104, 106, 107, 109
Hero Island, Lake Champlain, 50
Herrington Lake, Kentucky, 151
Hewlett, Ray, 96
Himalayas, 59–60
hippogriff, 102–4, 106, 107–8
hippopotamus, as hoax for monster, 14, 20
Histoire d'une bonne bouffe!, 71, 77
Historia Animalium (Gesner), 2
History of Northwestern New York, 83
hoaxes, xiv–xv, 7, 150, 162; bellows, allegedly used for Silver Lake serpent hoax, *Fig. 4.3*, 80, 84–85; fake photos, 15–20; fossils, 14; hippopotamus, as hoax for monster, 14, 20; "Kingstie," Lake Ontario, 107–8; Lake George "monster," 101–8; Loch Ness monster, *Fig. 1.3*, 14–17, 43, 49; Mansi photograph of "Champ," possibility of, 46–48; monster teeth, 15; newspaper hoaxes, 142–43; publicity stunts, 15; Silver Lake serpent, *Fig. 4.3*, 79–86; "Urnie," of Lake Urner, 145
Hoggart, Simon, 19–20, 24
Hog Island, Lake Champlain, 50
Hollowell, Laura, 38–39, 68
horned reptiles: and aboriginal rites, xi; Alkali Lake monster, xii; horned

serpents, xi, xii, 128, 130; horned snake, xi; killing people/livestock, xii; in Lake Van, Turkey, 145; stench of, xii; widespread tradition of, in the West, xii
horns, 13, 35, 39, 117, 130
"Humbug" Islands, Lake Erie, 143
humps, 21, 142, 143, 144, 145, 146; "Champ" of Lake Champlain, 31, 35, 38, 51–53; Loch Ness monster, 12–13, 20; as multiple fish/otters, 37–39; Ogopogo, 117, 118, 121, 131, 168, 169
hunting accident, as example of eyewitness mistakes, 161–62
Hutchinson, Mike, 19–20, 24
Huyghe, Patrick, 10, 157, 160, 173
hydrography, 61–62

Iceland, 2
"Igopogo," of Lake Simcoe, 140–42; description, 140–41
Ikedo-ko, Lake, Japan, 145–46
In Search of Lake Monsters (Costello), 121
In Search of Ogopogo (Gaal), 114, 117, 121, 134
"Interim Report" (Frieden), 48
International Dracontology Society of Lake Memphremagog, 74
International Society of Cryptozoology, 50
Inverness Courier, xiii, 11–12, 13
Ireland, 1, 21, 144
Island Harbour House, Lake George, 104
"Issie," of Lake Ikedo-ko, Japan, 145–46

Jason and the Argonauts, 1
Jewett, Uriah, 71–73
"John" (deckhand on Lake Champlain ferry), 33–34, 39, 68
Johnson, J. A., xii
Journal of American Folklore, xi

Kagoshima, Japan, 145–46
Kalamalka Hotel, B.C., 113
Katonak, Tom, 106, 109
Keel, John A., 83, 88
Kellogg, Phil, 106, 109
Kel-Oni-Won, 125
Kelowna, B.C., *Fig. 7.9*, 113, 114, 119, 131–32, 168, 169, 173
Kelowna Museum, 125
Kempenfelt Bay, Lake Simcoe, 140, 141
"Kempenfelt Kelly," 140–41. *See also* "Igopogo," of Lake Simcoe
Kentucky, 150–51
Kentucky Encyclopedia, The (Kleber), 151
Kentucky Lake, 151
Kerr, Ian, 170
Kielar, A., 23, 25
Killarney Island, Ireland, 21
Killarney Lake, New Brunswick, Canada, 138
Kimiecik, Kathy, 83, 88
"Kingstie," Lake Ontario, 107–8
Kirk, John, 68, 99, 136; and "Champ," 42, 43, 49; and "Cressie" of Lake Crescent, 89, 96; and Lake Okanagan, 113; and Ogopogo, 111, 113, 114, 119, 120, 128, 131, 168, 172; and Ogopogo sightings, 115, 118
Kleber, John, 151
Kodak Instamatic, 56, 158
Kojo, Yasushi, 31, 59, 68
kokanee, 113
Kolowisi (Zuni serpent-god), 130
Kopp, Jon, 38, 87, 88
Koran, 1
kraken, 4. *See also* giant squid
Kubodera, Tsunemi, 4

Lake Alymer, Quebec, 142

Lake Champlain. *See* Champlain, Lake
Lake Champlain Phenomena Investigation (LCPI), 38
Lake Crescent, *Figs. 5.1–5.2*, *Figs. 5.4-5.5*, 7, 89–99
Lake Crescent Inn, 97
Lake Erie, 142–43
"Lake Erie Larry," 142–43
Lake George, 7, 101–9
Lake George Historical Association Museum, 102, 104
Lake George "monster," *Figs. 6.1–6.2*, *Fig. 6.4*, 101–9; conclusion, after investigation, 109; description, 101–2, 106; real sightings, 108
Lake George village, 104
Lake Massawippi, 142
Lake Memphremagog. *See* Memphremagog, Lake
Lake Monster Traditions (Meurger and Gagnon), xii, 40, 124, 153
Lake Okanagan. *See* Okanagan, Lake
Lake Onondaga, xii, 143
Lake Ontario, xii, 107–8, 126, 143
Lake Seljordsvatnet, Norway, 143
Lake St. Francois, Quebec, 142
Lake Tahoe, Calif., 142
Lake Trois-Lacs, Quebec, 142
Lake Utopia, 38, 137–38
Lake Victoria, Africa, 146
Lake Williams, Quebec, 142
La Legende Restaurant, Magog, Quebec, 76
Lambton, John de, 123
Lambton family, 123
LeBlond, Paul H., 49–50, 56, 68, 69
legal protection, of monsters, 67, 143–44
Legend of L'il Ogie, The (Fromm), 133
leprechauns, 1, 89
Leurbost, Scotland, xiii
Levers, Don, 133, 136
Lewis, Robert, 106
Life magazine, 41
Loch Arkaig, Scotland, 38
Loch Morar, Scotland, 144
Loch Ness, Scotland, xii, xiii, xiv, *Fig. 1.1*, 11–12, 38, 66, 86, 144; length, 111, 149
Loch Ness monster, xii, xiii, 4, 111, 121, 141, 144; deer, swimming, as illusion of, 13, 21, 39; eyewitness description, *Fig. 1.2*, 12; fame of, 6, 7, 8, 137; flippers, *Fig. 1.4*; hoaxes, *Fig. 1.3*, 14–17, 43, 49; humps, 12–13, 20; lack of skeletal evidence of, 14–15, 41, 149; as a log, 36; mistaken sightings, 13–14, 23, 36, 38, 86; motion picture of, 21; otters, as mistaken sightings of, 13, 19, 37–39; photographs, *Fig. 1.3*, *Fig. 1.4*, 15–21, 40, 43, 49, 73; as pinniped, xiv; as plesiosaur, 13, 14, 15, 23, 145; research dollars spent on, 131; salmon, as producing "monster" effects, 12; seismic activity, causing apparitions of monster, 14; sightings of, 11–14; underwater searches, 21–24
Loch Ness Monster, The (Gould), 13–14, 18
Loch Ness Mystery Solved, The (Binns), 8, 13, 17, 21
Loch Ness Story, The (Witchell), 19
Loftus, E., 56, 69
logs, as mistaken monsters, 13, 14, 31, 36; "Champ" of Lake Champlain, *Figs. A1–A5*, 36–37, 165–67; hydrographic explanation of logs rising and falling, 61–62. *See also* driftwood
London Times, xiii
Lord, Thomas Reeves, 101, 104, 108, 109

Lough Leane aquatic monster, 21
Lough Ree, Ireland, 144
Ludington, Mich., 108
"Lukwata," of Lake Victoria, Africa, 146
Lutra canadensis, 38, 118
Lutra lutra, 13

Macdonald, John, 12
MacDougall, John, 123
Mackal, Roy P., xiv, 20–21, 83, 88, 121, 128, 136, 150, 151, 155
Maclean's magazine, 138–39
Magaguadavic River, 138
Magin, Ulrich, 144, 145, 147
Magog, Quebec, 74, 76
Malloy, Barbara, 71, 73, 74–76, 77, 150
Malvo, John Lee, 163
manatee, 36, 146
manes, 13, 36; of Ogopogo, 130
Mann, William, 101, 101–3
Mansi, Anthony, 43–44, 158
Mansi, Sandra, 29, 31, 67, 69, 134, 150, 153; deafness of monster, as described by, 54, 158; eyewitness testimony, xv, 55–58, 62; process gone through after taking photograph, 154–60; publication of photograph, events of, 45–48; taking the photograph, 43–45, 154–55, 158
Mansi photograph of "Champ," xv, *Fig. 2.6*, 43–63, 134, 150; animating, as part of investigation, *Figs. A1–A5*, 165–67; camera used, 29, 56, 158; conclusion, after investigation, 65; experiment to imitate, *Fig. 2.10*, *Fig. 2.11*, 56–57; Frieden analysis of, 48; hump and head not connected, 51–53; hydrographic explanation of driftwood rising and falling, 61–62; journalistic errors in reporting expert analysis of, 62; lack of movement of monster, 53–54; lack of organs on head, 53; lack of photographs after publication of, 66; LeBlond analysis, 49–50; location of sighting, 33; negatives, 45, 158; original print, 51; process gone through about before and after publication, 154–60; Radford analysis, *Fig. 2.10*, 50–63; Radford analysis, conclusion, 59–63; sandbar in, 48; scientific analysis of, 49–50; sinking into water, 54–55; size determination, *Fig. 2.10*, 56–59, 67; tracing from enlargement of, *Fig. 2.7*
maps, with monsters depicted, *Fig. I.1*, 2
Maquam Bay, Lake Champlain, 33, 50
Martinez, Lionel, 137, 147
Massawippi, Lake, 142
Massey, N., 10
Maugel, T., 10
McElroy, Rob, 29
McKinney, Mary, 139, 147
Memphremagog, Lake, *Fig. 3.1*, 7, 71–88, 142, 150; name, origin of, 71
"Memphre" of Lake Memphremagog, 71, 89, 137, 150; description, 73; name, origin of, 73–74; photographs, *Fig. 3.2*, *Fig. 3.3*, 74–75; sightings of, 71–73, 74–76
Meurger, Michel, 69, 136, 142, 147, 160; and "Champ," 34, 37, 40, 153; and monster legends, xii, 124, 126–27, 128, 130
Micmac Indians, 137
"Migo," Lake Dakatua, New Britain, 146
mink, 108
Missiquoi Bay, Lake Champlain, 33
mistaken sightings, 149–50; "Bangles

fallacy," of mistaking art for reality, 128; "bandwagon effect," of sightings increased by publicity, 40, 45, 134; beavers, *Fig. 3.3*, 73, 76, 120, 168–69; boat wakes, 13, 14, 39; "Champ" of Lake Champlain, 36–37, 42, 165–67; "Cressie" of Lake Crescent, 95–96; crocodiles, 146; deer, swimming, 13, 21, 39, 73, 86, 87, 138; distorted perceptions, 23, 36, 40, 55–56, 58–59; dolphins, 37, 146; driftwood, 21, 31, 33, 37, 53–55, 60, 86, 96; ducks, 145; fish, 12, 37, 42, 172; heightened expectancy, 36, 40, 63, 87–88, 162; Loch Ness monster, 13–14, 19, 23, 36, 37–39, 86; logs, *Figs. A1–A5*, 13, 14, 31, 36, 36–37, 61–62, 130–31, 165–67; manatee, 146; moose, 74; otters, 13, 19, 37–39; otters swimming in a line, *Fig. 7.5*, 117–20, 141–42; overestimation of size, 37, 39, 58–59, 87, 173; Silver Lake serpent, 86; sturgeon, 31, 37, 117, 142; watercraft as swimming monsters, 94–95; water reflections, 14
mokele-mbembe, of Africa, 146
Monk, Jerry, 61–62, 69
Monster Hunters (documentary), *Fig. 7.8*
Monster Island. *See* Rattlesnake Island, Lake Okanagan
Moon, Mary, 122, 123–24, 128, 136
moose, as mistaken monster, 74
"Morag," of Loch Morar, Scotland, 144
Morgan, Lawrence, 94, 99
Morgawr, 21
Mori, Kyoichi, 4
"Mosqueto," xii
"Ms. Crystal" of Crystal Lake, 71
Muhammad, John Allen, 163
Munster, Sebastian, 1
Murray, Jan, 137, 147
muskrats, 87, 113, 138
Mysteries and Monsters of the Sea (Spaeth), 158
Mysterious America: The Revised Edition (Coleman), xv
Mysterious Creatures: A Guide to Cryptozoology (Eberhart), 95, 141, 151

Nahuel Huapi, 145
"Nahuelito," of Argentina, 145
Naish, Darren, 146
Naitaka. *See* N'ha-a-itk
Napier, John, 60
National Academy of Design, 101
National Audubon Society Field Guide to North American Mammals (Whitaker), 118
National Geographic Television (NGTV), and Lake Okanagan expedition, 111, 114–16, 119, 168, 169, 170, 173
National Museum of Scotland, 14
Native Americans/Canadians: Beothuk Indians, 89; and "Champ" of Lake Champlain, lack of sightings by, 40; Creek, xi; and "Cressie" of Lake Crescent, 89; horned serpents, in legends of, xi, xii, 128, 130; and Lake Memphremagog, 71; Micmac Indians, 137; myth and reality, lack of importance of distinction, 125; in Nebraska, xii; and N'ha-a-itk, at Lake Okanagan, 121–30, 135; at Okanagan, Lake, 111, 113; Okanakane Indians, 124; Oneida, xii; Pueblo Indians, 128; and Silver Lake serpent, 86; Sushwap Indians, 124; Tuscaroras, xii; Zuni Indians, 128
Natural History (Pliny the Elder), 2
Neigher, Alan, 46, 51

"Nessie." *See* Loch Ness monster
Nessiteras chameleonopteryx. *See* Loch Ness monster
New Britain, 146
New Brunswick, Canada, 38, 137
Newfoundland, 7, 89, 126
Newport, Vt., 74
Newport Bay, Lake Memphremagog, 73
New York's Department of Environmental Conservation, 38
New York Times, 45
New Zealand, 4
N'ha-a-itk, 113, 121–30, 135; attacks/ killing by, 122–23, 134; black magic powers, 123–24; demanding ransom of live sacrifice, 122, 125; fearsome nature of, 121; home, 122; Kel-Oni-Won, as predating, 125; man made to be, as punishment for murder, 125; petroglyphs of, 127–28, 130; relationship to Ogopogo, 125–26, 127–28, 130–31; and social control, using fear of, 125; social function of, 126–27; translation of name, 122
Nickell, Joe, *Fig. 4.2*, *Fig. 6.2*, 9, 10, 24, 68, 69, 77, 88, 109, 147, 159, 168, 172; and "Champ" experiments, 56; maps and drawings by, *Figs. 1.1–1.2*, *Fig. 2.1*, *Fig. 3.1*, *Fig. 7.1*, *Fig. 7.5*; mistaken sightings, 38, 39, 96, 108, 138; monster hoaxes, 14, 16, 21; and monster legends, 11; naming of monsters, 40; photographs by, *Figs. 2.2–2.5*, *Figs. 2.10–2.11*, *Fig. 4.1*, *Fig. 4.3*, *Figs. 6.3–6.4*, *Figs. 7.3–7.4*, *Fig. 8.1*
Norm's Bait and Tackle, 31

octopus, 6
Ogasawara Islands, 4
Ogopogo, xiv, 9, 27, 111–35, 137, 141, 149; attacks/ killing by, 134; children's books about Ogie as, 132–33; conclusion, after investigation, 120; descriptions, 117, 121, 130–31; divers investigating, *Fig. 7.2*, 114; expedition to investigate, 111–20; experiment to imitate film of, 119; eyewitnesses of, 115; film and video analysis, 168–74; film and video of, 119–20; folklore about, 113, 121; home, 113, 122; lack of skeletal evidence of, 115; lack of skeletal evidence of prey of, 114; as log, 130–31; mistaken for swimming otters, *Fig. 7.5*, 117–20; multiple persons sighting of, 119, 169; as N'ha-a-itk (Native American legend), 121–30; as Ogie, the lovable mascot, *Fig. 7.9*, *Fig. 7.10*, 131–33, 135; origins of name, 113; palindromic nature of name, 113; photographs and video of, 115; reality of, in 1920s, 131; reconciling different incarnations of, 134–35; relationship to N'ha-a-itk, 125–26, 127–28, 130–31; seaplane search for, *Fig. 7.4*, 115; sightings, 117–18, 130–31; sightings increasing, after song published naming it, 134; sonar, use of in investigation of, *Fig. 7.3*, 114, 115, 131
Ogopogo (Gaal), 170
"Ogopogo: The Funny Fox-Trot, The" (song), 113, 134
Ogopogo: The Misunderstood Lake Monster (Levers), 133
"Ogopups," 117
Ohio River, xi
Okanagan, Lake, xii, xiv, 7, 9, 45, 66, 111–35, 141, 168–74; depth, 111,

113; length, 111; map, *Fig. 7.1*; rare freezing of, 113; sonar investigation of, *Fig. 7.3*, 63, 114, 115, 131; tourism industry, 131–33
Okanagan Valley, British Columbia, 111, 128, 130, 135
Okanakane Indians, 124
Olavarria, C., 10
Olsson, Peter, xiv
Omaha World-Herald, xii
Oneida Indians, xii
Onondaga, Lake, xii, 143
Ontario, Lake, xii, 107–8, 126, 143
Optical Sciences Center, University of Arizona, 46
Ortelius, 2
Oswego, Lake Erie, 143
Otter Creek, Lake Champlain, 31, 38
otters, 13, 19, 96, 113; creating illusion of humps of monsters, 37–39; creating illusion of sea serpent, 73, 86–87, 168; swimming in a line, *Fig. 7.5*, 117–20, 141–42
Oudemans, Antoon Cornelis, xiv
Owen, Elizabeth, 29, 69

Palmer, Richard, 143, 147
Papua New Guinea, 146
paranormal writing, shoddy scholarship in, 159–60
Parker, Dave, 125
Parsons, Fred, *Fig. 5.4*, 92–94, 96, 99
Peace, Carolyn, 83, 84, 88
Peachland, B.C., 126, 171
Pear, Nancy, 54, 68, 131, 135
Pegasus, 1
Penrod, Bruce, 87, 88
Penticton, British Columbia, *Fig. 7.1*, 111
Perron, Darren, 74, 77
Perry, N.Y., 79–84
Peterborough, Ontario, 128
petroglyphs of monsters, *Fig. 7.8*, 127–28
Phillips, Fred H., 138, 147
photographs, xii; black and white versus color, 18; of "Champ" of Lake Champlain, xv, *Fig. 2.6*, 7, 29, 31, 43–63; hoaxes, 15–20; Loch Ness monster, *Fig. 1.3*, 15–21; Mansi photograph of "Champ," xv, *Fig. 2.6*, 43–63, 154–60, 165–67; "Memphre" of Lake Memphremagog, *Fig. 3.2*, *Fig. 3.3*; of Ogopogo, 115; Stuart, Lachlan, of "Nessie," 19; underwater photographs, *Fig. 1.4*, 21–23
Piccardi, Luigi, 14
Pickett, Thomas J., 84, 88
Pierce, Sidney, 4, 6, 10
pinnipeds, xiv, xv
Pioneer Museum, Perry, N.Y., 84
Plattsburgh Press-Republican, *Fig. 2.9*, 53
Plattsburgh Republican, 35
plesiosaurs, xiv, 38, 40; "Champ" of Lake Champlain, *Fig. 2.8*, 27, 53, 73, 145, 149; Loch Ness monster, 13, 14, 15, 23, 145; "Memphre" of Lake Memphremagog, 73; "Nahuelito," of Argentina, 145; Ogopogo, 117
Pliny the Elder, 2
Plucknett, Alex, 161–62
Plucknett, Dennis, 161–62, 163
Porter, Marjorie L., 34, 43, 69
Port Henry, N.Y., 29, 31, 33, 45, 66, 153
Port Kent, N.Y., 33
Power, Jennifer, 96, 99
prehistoric reptiles, xiv, xv
Private Life of Sherlock Holmes, The (1970), 17
Proof Positive (SciFi Channel program), 168
Pueblo Indians, 128

pulley lines, used for fake monsters, *Fig. 6.3*, 102, 105
Pultneyville (N.Y.) Commercial Press, 143
Punch and Judy, 21
Puttkamer, Peter von, *Fig. 7.8*

Quebec, Canada, xii, 7, 71, 74, 76, 142

Rabbit's Arm. *See* Robert's Arm, Newfoundland
Radford, Benjamin, *Fig. 2.2*, *Fig. 5.4*, 24, 68, 69, 77, 99, 136, 147; and "Champ" expedition, 33; and lack of skeletal evidence, 15; and Lake George "monster," 104; Mansi photograph analysis, *Fig. 2.10*, 29, 50–63; maps and drawings by, *Figs. 2.7–2.8*, *Fig. 5.1*; and "Memphre," 73–76; and Ogopogo, 111, 121, 168; photographs by, *Figs. A1–A5*, *Fig. 2.10*, *Fig. 2.13*, *Fig I.3*, *Fig. 5.2*, *Figs. 5.4–5.5*, *Fig. 6.2*, *Fig. 7.2*, *Figs. 7.6–7.7*, *Figs. 7.9–7.10*
Ramsey, Charles H., 163
Rana catesbeiana, 139
Rattlesnake Island, Lake Okanagan, *Fig. 7.4*, *Fig. 7.6*, 113, 114; physical dangers of, 126
Raynor film, of "Nessie," 19
Razdan, R., 23, 25
reflections, as mistaken monsters, 14
Rice, Clark, 83–84
Rideout, Pierce, 92
Rines, Robert, 21–23
Roberts, Frank D., 80–81, 83, 84, 86, 88
Robert's Arm, Newfoundland, 89, 90, 92, 95–96, 98
Roed, Murray A., 113, 136
Roesch, Ben, 146
Rowland, Bruce, *Fig. 2.9*
Royal Air Force's Joint Air Reconnaissance Intelligence Center, 21
Royal Canadian Mounted Police divers, 95
Ruah bed and breakfast, Lake George, 105
Runnalls Denby (surveyors), *Fig. A.6*, 173
Rutkowski, Mark, 108
Ryan, Hughie, 96

sacrifices to monsters, 126–27
salamanders, 43
salmon, as producing "monster" effects, 12
Sansom, E. W., 140, 147
Sasquatch, xi, 124
scientific investigations of lake monsters: beginnings, xiii, 3–4; versus compilations, 8; late twentieth century, xiv–xv; nineteenth century, xiv; scientific method, importance of, 8–9, 156
SciFi Channel, 168
Scott, Lloyd, 23–24
Scott, Walter, 86, 88
seals, xiv
sea monsters: compared with lake monsters, reports of, 6–7; evidence of, 4, 6
Searching for Hidden Animals (Mackal), 83, 150
seiche (underwater wave), 37, 60–61
seismic activity, causing apparitions of monsters, 14
Seljordsvatnet, Lake, Norway, 143
"Selma," of Lake Seljordsvatnet, Norway, 143
"Seymour"/"Semoe" of Seymour Lake, 71
Seymour Lake, 71

Shiels, Tony "Doc," 21
Shine, Adrian, 14
Shuker, Karl, 113, 128, 134, 136, 146
sightings of monsters, 7; in Africa, 146; Asia, 145–46; "Champ" of Lake Champlain, *Fig. 2.3*, 31, 34–40; conclusion, after total investigation, 149–51; "Cressie" of Lake Crescent, 89–95; distances viewed from, 36; interviewing eyewitnesses, 8, 9, 114, 146; in Ireland/Scotland/Wales, xiii, 1, 21, 144; Kentucky, 150–51; Lake George "monster," 108; at Lake Simcoe, Ontario, Canada, 140–42; in lakes in Quebec, 142; Lake Tahoe, 142; at Lake Utopia, New Brunswick, Canada, 137–38; Loch Ness monster, 11–14; "Memphre" of Lake Memphremagog, 71–73, 74–76; modern, xii; multiple person sightings of Ogopogo, 119, 169; in Norway/Sweden, 143–44; Ogopogo, 117–18, 130–31, 134; in the Pacific, 146; in Poland/Switzerland, 144–45; publication of, 9; related to publicity, 134; Silver Lake serpent, 86–87; in South America, 145. *See also* mistaken sightings
Silver Bay, Lake George, 106, 108
Silver Bay Association, 108
Silver Lake, *Fig. 4.1*, 7, 38, 79–88
Silver Lake serpent, 79–88; conclusion, after investigation, 87–88; sightings, 86–87
Silver Lake Serpent Festival, 81; hot-air balloon, in shape of serpent, *Fig. 4.2*
Simcoe, Lake, 64, 140–42
60 Minutes II, 23
skeletal evidence, lack of, 6, 14–15, 41, 67, 90, 115, 149; of prey of monsters, 114
Skeptical Inquirer magazine, 19
Smith, Richard D., 16, 18, 25, 46, 69
Smith, Robin, 74, 77
Smithsonian Institution, 60
sonar, use of, *Fig. 7.3*, 31–32; difficulty of relying on, 23, 63–64; at Lake Champlain, 63–65; at Lake Okanagan, *Fig. 7.3*, 63, 114, 115, 131; at Lake Simcoe, Ontario, Canada, 141; at Lake Simcoe, Ontario, Canada, noticing of large animal, 140, 142
"South Bay Bessie," of Lake Erie, 142–43
South Pond, 95
Spaeth, Frank, 158, 160
speed, of swimming otters, 118
Spelman, Louis, 106–7
Spicer, Mr., 13
Sproat Lake, Vancouver Island, *Fig. 7.8*, 128
Spurling, Christian, 16–20
Squally Point, Lake Okanagan, 113, 123, 126
St. Albans, Vt., 33
St. Augustine (Florida) Sea Monster, 4, 6
St. Francois, Lake, Quebec, 142
St. George, New Brunswick, 138
St. Johnsbury, 73
St. Lawrence Seaway, 64, 142
Stonehouse, Frederick, 108, 109
Storsjo, Sweden, xiv
Storsjoen, Lake, Sweden, 143–44
"Storsjoe," of Lake Storsjoen, Sweden, 143–44
Stowell, Henry, 143
St. Pierre, Norm, *Fig. 2.4*, 31–33, 63, 69
Strange and Unexplained Happenings (Clark and Pear), 131

Strange Creatures from Time and Space (Keel), 83
"Strange Spectacle in Loch Ness," 11
Stuart, Lachlan, 19
sturgeon, 31, 33, 35, 37, 117, 142
Sundberg, Jan-Ove, 143
Superior, Lake, 126, 143
Sushwap Indians, 124
Suttles, Wayne, 127
Sweden, xiv, 1, 143–44

Tahoe, Lake, Calif., 142
tails, of monsters, xiv, 42, 127, 141; N'ha-a-itk, 123; Ogopogo, *Fig. 7.5*, 117, 118
Tappan, Sandi, 41
Tappan, Walter, 41
Tasmanian West Coast Monster, 4
"Teggie," of Lake Bala, Wales, 144
Tele, Lake, Africa, 146
Tennessee, xi
Teresi, Dick, 34, 37, 41, 60–61, 69
"Tessie" of Lake Tahoe, 142
Thal, Larry, 119, 169
Thal Film (of Ogopogo), 119; analysis, 169–71; film artifact, giving mistaken "neck" of monster, 170
Tianchi Lake, China, 145
Timbasket, 123
Toronto, Canada, 140
tourism industry: Crescent, Lake, 96–97; of Lake Okanagan, 131–33, 134–35; as source of monster stories, 96–97
Town Topics, 101
Travers, Eileen, 74, 77
tree rind, as mistaken monster sighting, 96, 98
Trois-Lacs, Lake, Quebec, 142
trolls, 1
Tromblee, William "Pete," 31
trout, 113
Tully, Brock, 132–33, 136
Turkey, 145
Tuscarora Indians, xii
tusks, 13

UFOlogy, 143, 160
underwater cameras, 142
underwater photographs, *Fig. 1.4*, 21–23
underwater searches: Loch Ness monster, 21–24; sonar evidence, 23. *See also* sonar, use of
unicorns, 1, 2
uniqueness, of lake monsters, 7
United Press International, 62
University of Arizona, 46, 62
University of British Columbia, 49
University of Chicago, xiv, 62
Unsolved Mysteries TV show, 157, 158, 169
Urner Lake, Switzerland, 144–45
"Urnie," of Lake Urner, 144–45
Urquhart Castle, 20
U.S. Customs label, on Lake George "monster," *Fig. 6.4*, 106
Utopia, Lake, 38, 137–38

Vachon, Brian, 36, 69
Valcour ferry, 33–34, 39
Van, Lake, Turkey, 145
"Vanna," of Lake Van, Turkey, 145
Venise Bay, Lake Champlain, 33
"Vermonsters," 71
Vermont, 31, 33, 71
Vermont Life, 34
Vermont Today, 42
Vernon, British Columbia, *Fig. 7.1*, 111, 113
Verrill, A. E., 6
Victoria, Lake, Africa, 146
videotape: of "Champ" of Lake Champlain, 41–42; of "Igopogo,"

of Lake Simcoe, 140–41; of "Issie," of Lake Ikedo-ko, Japan, 146; of "Migo," Lake Dakatua, New Britain, 146; of Ogopogo, 115, 119–20, 168–74; of "Teggie," of Lake Bala, Wales, 144; of "Vanna," of Lake Van, Turkey, 145. *See also individual films of Ogopogo*
Virgin Islands, 107
Vogel, Charity, 84, 88
von Muggenthaler, Elizabeth, 64–65, 69

Walgren Lake. *See* Alkali Lake
Walker, Artemus B., 80, 83, 84, 86
Walker Hotel, Perry, N.Y., 79–80
"Walk Like an Egyptian" (song), 128
Walsh, Dave, 143, 147
Warr, Bruce, 97
Warr, Evelyn, 97
Warren, Jill, 94
Warren, Nick, 159–60
Warr's Service Station, Robert's Arm, Newfoundland, 92
Washington D.C. sniper hunt, as example of eyewitness mistakes, 162–63
water-kelpie, xiii
"Water-Monsters of American Aborigines" (Gatschet), xi
Watrous, Harry, 101–8, 109
"Wenbo," of Tibet, 145
Westbank, B.C., 131
Wetherell, Marmaduke, 16–17, 19–20
whales, xiv; beluga, 64–65; "blobsters" as remains of, 4, 6, 10
Whitaker, John O., Jr., 38, 69, 113, 118, 136
Whitehall, N.Y., 29
Wickstrom, Lois, 76, 77
Wilder, Billy, 17
Williams, H., 56, 69
Williams, Lake, Quebec, 142
Willoughby Lake, 71
"Willy" of Willoughby Lake, 71
Wilson, Kelly, 137, 147
Wilson, Robert, *Fig. 1.3*, 15–20
Wilson, Tony, 137, 138, 147
wind slicks, as mistaken sightings, 39, 86, 138
winged dragons, 2, 35
winged serpents, 1
Witchell, Nicholas, 19
With Hope We Can All Find Ogopogo (Tully), 132–33
Wong family sketch of Ogopogo, 170
Wooldridge, Anthony, 59–60, 69
Worden, John, 86
Wyoming County, N.Y., 79
Wyoming County Mirror, 80
Wyoming Times, 79, 83, 85

Yeti, 60
York Sunbury Historical Society Museum, Fredericton, New Brunswick, Canada, 138

Zarzynski, Joseph, 69–70, 109; and "Champ," 29, 35, 36, 37, 38, 39, 40, 42, 43, 48, 53, 153, 155, 156; and Lake Champlain, 27; and overestimation of size, 58–59; and photographic analysis, 50, 52; and protection of "Champ," 67
Zeegrzynski, Lake, Poland, 144
zeuglodons, xiv, 27, 117
zoology, 4
Zug, George, 41, 70
Zuni Indians, 128